4th Edition

New Mexico Public Education Department College & Career Readiness

# New Mexico CAREER CLUSTERS GUIDE





Dear Career Planner,

I'm excited to share this 4th Edition of the New Mexico Career Clusters Guide, which has been put together by the College and Career Readiness Bureau in partnership with Pathway2Careers™ (P2C). This guide is a resource for students, parents, counselors, faculty, and anyone considering a career change in our state. It provides guidance on job opportunities while offering up-to-date information on wages and educational paths within New Mexico.

We are incredibly thankful for the feedback we received about previous editions and are thrilled to present this new edition with updated occupational data. Our dedication to empowering individuals with information remains unwavering.

At its core, this guide focuses on career clusters and their associated pathways. It emphasizes the knowledge and skills needed for success in each career field. This innovative approach not only enhances career education but also equips individuals with a strong foundation that prepares them for various occupations and specialized careers. It combines employability knowledge, technical expertise and academic skills – a recipe for success.

The 4th edition introduces Recommended Programs of Study – designed sequences of high school courses. I highly recommend these programs because they are specifically designed to prepare students for in-demand careers that offer good wages and are available here in our state. Our goal is to empower our students with the knowledge and skills needed to embark on fulfilling career paths.

The New Mexico Public Education Department is committed to supporting our states workforce system. This guide reflects that commitment by helping students explore career options that match their interests clearly defined pathways and projected job opportunities.

I would like to take this opportunity to extend our heartfelt gratitude to P2C for their invaluable partnership in bringing this fourth edition of the New Mexico Career Clusters Guide to fruition. Their unwavering support and dedication have played a pivotal role in ensuring that this guide continues to serve as a comprehensive and reliable resource for our students and the wider community.

By using this guide students will have the tools they need to make decisions about their careers ensuring their success as contributors, to New Mexico's dynamic and ever-changing economy.

Sincerely,

Breezy Gutierrez Director, College and Career Readiness Bureau

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## INTRODUCTION TO CAREER CLUSTERS

## **Career Clusters Overview**

#### **Definition and Purpose**

The National Career Clusters Framework is a tool that organizes occupations within Career and Technical Education (CTE) programs. Jobs within the same cluster require similar knowledge, skills, and abilities. The framework groups occupations into 16 clusters with 79 pathways to explore. A career pathway is a sequence of connected and structured education programs and support services that allow students to progress toward meaningful job opportunities, higher levels of education, and required training. People who enjoy a job within a particular career cluster are likely to enjoy other jobs within the same career cluster.

#### **Benefits of Exploring Career Clusters** A New Perspective

As students learn about the sixteen National Career Clusters, they often discover interests in occupations unknown to them before. Taking the P2C Cluster Matcher leads students to self-discovery in how they are aligned or not aligned with specific career clusters.

#### Lean In To or Eliminate Potential Careers

While learning about the sixteen career clusters, students often feel aligned with or disinterested in particular career clusters. Being able to eliminate careers allows students to keep other potential careers in their focus and on their radar.

#### **Data-Based Decision Making**

Rather than choosing a career based on a peer's choice, parental preferences, or just getting a job to join the workforce, using the P2C Cluster Matcher provides students with up-to-date assessment results to guide a student towards a career where students are most aligned.

#### **Reaching Goals**

When students truly understand all of the steps to reach a career goal, they are able to choose a career pathway, plan for high school and post-secondary coursework, choose appropriate programs of study or majors, select post-secondary institutions, and achieve short and long-term goals.

#### How to Use the Guide

This guide is designed for students, parents, and educators to understand how P2C can be used to help students as they navigate their career journey.

Under "Who Benefits from P2C", middle and high students will learn about specific action steps they can take using P2C as they journey through their career planning process. Parents can use the guide to gain a broader understanding of the career planning process, learn how P2C's Career Tools support career exploration, and engage with their child's career journey. Educators who use P2C learn how to access the career tools and curriculum to support students through their career exploration and development.

## Relationship Between Clusters and Career Pathways

Each of the sixteen career clusters includes multiple career pathways toward a career. A career pathway is a sequence of connected and structured education programs and support services that allow students to progress toward job opportunities, higher levels of education, and required training. Each pathway identifies knowledge, skills, and a plan of study. For example, for the STEM career cluster, there are two pathways: Engineering and Technology pathway & Science and Mathematics pathway. Each pathway has unique knowledge, skills, and plans of study.

#### **Career Clusters and The Career Pathways**

Career clusters are groups of occupations that require a common knowledge base and the use of similar skills. Each cluster contains several smaller groups called career pathways that connect to educational programs, industries, and careers. While a career cluster paints a broad picture of a group of occupations, a pathway helps you focus on and develop a clear, more informed educational plan over time.

Career Cluster	Description	Career Pathway
Agriculture, Food & Natural Resources	Do you enjoy working with plants and animals? Interested in working to conserve natural resources or protect the environment? This cluster includes careers in the planning, production, processing, management, distribution, and marketing of agricultural products, including food, plants, animals, fabrics, wood, and crops.	<ul> <li>Agribusiness Systems</li> <li>Animal Systems</li> <li>Environmental Service Systems</li> <li>Food Products &amp; Processing Systems</li> <li>Natural Resources Systems</li> <li>Plant Systems</li> <li>Power, Structural &amp; Technical Systems</li> </ul>
Architecture & Construction	Do you want to design, build, and maintain structures where people live, work, and play? This cluster includes careers in designing, planning, managing, building, and maintaining the built environment.	<ul> <li>Construction</li> <li>Design/Pre-Construction</li> <li>Maintenance/Operations</li> </ul>
Arts, Audio/Video Technology & Communications	Do you like to perform? Do you love to use your artistic creativity on the job? This cluster includes careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.	<ul> <li>Performing Arts</li> <li>Media Design Arts</li> <li>Production and Managerial Arts</li> </ul>
Business, Management & Administration	Are you entrepreneurial? Do you like to plan and organize activities? This cluster includes careers in planning, organizing, directing, and evaluating business functions essential to effective business operations.	<ul> <li>Administrative Support</li> <li>Business Information Management</li> <li>Human Resources Management</li> <li>General Management</li> <li>Operations Management</li> </ul>
Education & Training	Do you enjoy teaching others? Are you comfortable with public speaking? This cluster includes careers in planning, managing, and providing education and training services and related learning support services, including administration and library services.	<ul> <li>Administration &amp; Administrative Support</li> <li>Professional Support Services</li> <li>Teaching/Training</li> </ul>
Finance	Do you like to work with numbers? Do you want to help people plan for their financial futures? This cluster includes careers in financial and investment planning, banking, insurance, and business financial management.	<ul> <li>Banking &amp; Related Services</li> <li>Business Financial Management</li> <li>Financial &amp; Investment Planning</li> <li>Insurance Services</li> </ul>
Government & Public Administration	Are you interested in government and politics? Would you like to help pass law? This cluster includes careers in planning, managing, and providing government services at the federal, state, and local levels; including legislative, administrative, and regulatory services.	<ul> <li>Governance</li> <li>National Security</li> <li>Planning</li> <li>Public Management &amp; Administration</li> <li>Regulation</li> <li>Revenue &amp; Taxation</li> </ul>
Health Science	Do you enjoy helping people feel better? Would you like working in a hospital or other medical facility? This cluster includes careers in planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnological research and development.	<ul> <li>Biotechnology Research &amp; Development</li> <li>Diagnostic Services</li> <li>Health Informatics</li> <li>Support Services</li> <li>Therapeutic Services</li> </ul>

Career Cluster	Description	Career Pathway
Hospitality & Tourism	Do you want to help other people enjoy their leisure time? Would you like to work in a hotel or in a restaurant? This cluster includes careers in the management, marketing, and operations of restaurants and other food services, lodging, attractions, recreation events, and travel-related services.	<ul> <li>Lodging</li> <li>Recreation, Amusements &amp; Attractions</li> <li>Restaurants &amp; Food/Beverage Services</li> <li>Travel &amp; Tourism</li> </ul>
Human Services	Do you like to help people? Would you enjoy teaching people how to improve their lives? This cluster includes careers that involve tending to families and to human needs.	<ul> <li>Consumer Services</li> <li>Counseling &amp; Mental Health Services</li> <li>Early Childhood Development &amp; Services</li> <li>Family &amp; Community Services</li> <li>Personal Care Services</li> </ul>
Information Technology	Do you like technology? Do you enjoy working with computer hardware, software, multimedia, or network systems? This cluster includes careers related to the design, development, support, and management of hardware, software, Internet, multimedia, and systems integration services.	<ul> <li>Information Support &amp; Services</li> <li>Network Systems</li> <li>Programming &amp; Software Development</li> </ul>
Law, Public Safety, Corrections & Security	Do you like to help protect other people's safety? Do you want to help enforce the law? This cluster includes careers in planning, managing, and providing legal, public safety, corrections, protective services, and homeland security, including professional and technical support.	<ul> <li>Correction Services</li> <li>Emergency &amp; Fire Management Services</li> <li>Law Enforcement Services</li> <li>Legal Services</li> <li>Security &amp; Protective Services</li> </ul>
Manufacturing	Do you like to design and make things? Are you comfortable working with machines? This cluster includes careers in planning, managing, and performing the processing of materials into intermediate or final products and related professional and technical support activities, such as production planning and control, maintenance, and manufacturing/process engineering.	<ul> <li>Maintenance, Installation &amp; Repair</li> <li>Manufacturing Production Process Development</li> <li>Production</li> <li>Quality Assurance</li> </ul>
Marketing, Sales & Service	Do you like to sell products or services? Are you friendly and outgoing? This cluster includes careers in planning, managing, and performing marketing activities to reach organizational objectives.	<ul> <li>Merchandising</li> <li>Marketing Management</li> <li>Marketing Communications</li> <li>Marketing Research</li> <li>Professional Sales</li> </ul>
Science, Technology, Engineering & Mathematics	Do you like science or math? Do you enjoy solving problems? This cluster includes occupations and careers in planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering), including laboratory and testing services, and research and development services.	<ul><li>Engineering &amp; Technology</li><li>Science &amp; Math</li></ul>
Transportation, Distribution & Logistics	Would you like to fly planes, drive trucks, or pilot ships? Would you enjoy planning roads or power systems? This cluster includes careers in planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water as well as related professional and technical-support services, such as transportation- infrastructure planning and management, logistics services, mobile equipment, and facility maintenance.	<ul> <li>Facility &amp; Mobile Equipment Maintenance</li> <li>Health, Safety &amp; Environmental Management</li> <li>Logistics Planning &amp; Management Services</li> <li>Sales &amp; Service</li> <li>Transportation Operations</li> <li>Transportation Systems/Infrastructure Planning, Management &amp; Regulation</li> <li>Warehousing &amp; Distribution Center Operations</li> </ul>

Source: 0\*NET OnLine onetonline.org/find/career

## EXPLORING CAREER CLUSTERS



## **About Overview**

Information about career clusters can provide students with valuable insights as they plan their career paths. Career cluster data can help students identify various occupations and explore paths to reach their career goal. This section serves as a comprehensive guide and useful tool in determining a preferred career cluster. Identifying a cluster can help learners make informed decisions regarding education and career choices that can serve as a foundation for a successful and fulfilling career journey.

The following definitions help learners understand the data included in the High-Value Occupations table for each cluster:

- **High-Value Occupation:** High value is defined as highdemand, high-wage occupations that are stable or growing in demand. Occupations with the highest annual openings and median wages that are above \$35,000 are included.
- Job Zone: A Job Zone is a group of occupations that are similar in how much education people need to do the work; how much related experience people need to do the work; and how much on-the-job-training people need to do the work. Details on job zones are available on each **Cluster Map**.
- **Interest Matcher:** Identifies the interests most commonly associated for this occupation. For additional details on the Interest Matcher see page 281.
- **Annual Openings:** Measures the yearly number of vacancies of a particular job and is used to estimate the demand of the job.
- **Median Wage:** Represents the midpoint of all salaries within an occupation category.
- **Technology, Knowledge, Skills, and Abilities:** Combines the qualifications an individual needs to perform a specific job.

The data presented here can be divide into 3 main sections:

- For each cluster, **core skills** are listed along with a detailed listing of **pathways and the occupations** within them.
- Next, a detailed analysis of the **top 10 High-Value occupations** are outlined and can be evaluated with regards to job description, education required, interest matcher results, demand, wage and employment statistics, technology, knowledge, skills and abilities required for each of these careers. This analysis can provide valuable guidance for career preparedness to both the student and the educator.
- Lastly, a **cluster map** presents occupations within this cluster categorized by educational requirement. The purpose of this map is to assist educators and students in developing awareness of entry and exit points within a career field by assigning occupations to job zones along with information about the wage they pay and their demand in the local market.

## Agriculture, Food and Natural Resources

Think about life without agriculture, food and natural resources. What would we eat? Who would create and maintain the parks that help us relax and enjoy nature? Where would we get help for sick pets? This industry has a huge impact on our daily lives, and – like other industries – technology has brought about changes in the way it operates.

Large farms increasingly use precision-agriculture sensing technology, such as drones, to monitor soil conditions; GPS systems to help steer machinery more precisely; and computer-based maps to prescribe amounts of fertilizer, seed, and chemicals for specific areas. Bioscientists have developed genetically modified organisms (GMOs) that increase crop yield and resistance to pests and disease.

Organic farming, which seeks to avoid chemicals, continues to show economic growth. While responsible for only a little more than 4 percent of total U.S. food sales, sales of organic foods are more than two-and-a-half times greater now than they were 10 years ago.

The Agriculture, Food and Natural Resources cluster contains occupations that require all levels of training. Landscaping and groundskeeping workers and nonfarm animal caretaker positions are among the fastest-growing occupations that require the least training in this cluster. Jobs that usually require associate and bachelor's degrees such as veterinary technologists and technicians, environmental engineers, and cartographers and photogrammetrists are also projected to increase. Employers who often hire workers in this cluster include farmers; federal, state and local governments; pest control businesses; and landscaping companies.



## **Core Skills**

- Operation & Control
- Repairing
- Equipment Maintenance
- Troubleshooting
- Equipment Selection

- Science
- Operation Monitoring
- Quality Control Analysis
- Management of Material Resources
- Management of Personnel Resources

## **Career Pathways and Occupations**

#### Natural Resources Systems Pathway

#### Architecture & Engineering

Mechanical Engineering Technicians; Other Engineering Technicians; Cartographers & Photogrammetrists

#### **Construction & Extraction**

First-Line Supervisors of Construction Trades & Extraction Workers; Earth Drillers, Except Oil & Gas

#### Education, Training & Library

Biological Science Teachers, Postsecondary; Recreation & Fitness Studies Teachers, Postsecondary

#### Farming, Fishing & Forestry

Logging Equipment Operators; First-Line Supervisors of Farming, Fishing & Forestry Workers

#### Life, Physical & Social Science Management

Environmental Scientists & Specialists; Environmental Science & Protection Technicians; Zoologists & Wildlife Biologists; Forest & Conservation Technicians; Conservation Scientists; Foresters

#### Management

Natural Sciences Managers
Personal Care & Service

Recreation Workers

#### **Transportation & Material Moving**

Industrial Truck & Tractor Operators; Refuse & Recyclable Material Collectors; Excavating & Loading Machine & Dragline Operators; Conveyor Operators & Tenders Captains, Mates & Pilots of Water Vessels; Tank Car, Truck & Ship Loaders

#### Food Products & Processing Systems Pathway

#### **Building & Grounds Cleaning & Maintenance**

#### Pest Control Workers

**Computer & Mathematical** Computer User Support Specialists

#### Farming, Fishing & Forestry

First-Line Supervisors of Farming, Fishing & Forestry Workers; Graders & Sorters of Agricultural Products; Agricultural Inspectors

#### Life, Physical & Social Science

Chemical Technicians; Agricultural & Food Science Technicians; Food Scientists & Technologists

#### Office & Administrative Support

First-Line Supervisors of Office & Administrative Support Workers

#### Production

Slaughterers & Meat Packers; Meat, Poultry & Fish Cutters & Trimmers; Butchers & Meat Cutters; Food Batchmakers; Food & Tobacco Roasting, Baking & Drying Machine Operators & Tenders; Food Cooking Machine Operators & Tenders



## **Career Pathways and Occupations**

#### **Environmental Service Systems Pathway**

Occupation

Architecture & Engineering Environmental Engineers; Environmental Engineering Technicians

Building & Grounds Cleaning & Maintenance Pest Control Workers

**Construction & Extraction** Hazardous Materials Removal Workers

Healthcare Practitioners & Technicians Occupational Health & Safety Specialists; Occupational Health & Safety Technicians Life, Physical & Social Science Environmental Science & Protection Technicians

Production Water & Wastewater Treatment Plant & Systems Operators

**Transportation & Material Moving** Refuse & Recyclable Material Collectors

#### **Animal Systems Pathway**

Farming, Fishing & Forestry First-Line Supervisors of Farming, Fishing & Forestry Workers

Healthcare Practitioners & Technicians Veterinary Technologists & Technicians; Veterinarians

Healthcare Support Veterinary Assistants & Laboratory Animal Caretakers Life, Physical & Social Science Agricultural & Food Science Technicians; Zoologists & Wildlife Biologists

Personal Care & Service Animal Trainers

Sales & Sales Related First-Line Supervisors of Retail Sales Workers

#### **Plant Systems Pathway**

Arts, Design, Entertainment, Sports & Media Floral Designers

Building & Grounds Cleaning & Maintenance Landscaping & Groundskeeping Workers; First-Line Supervisors of Landscaping, Lawn Service & Groundskeeping Workers; Tree Trimmers & Pruners; Pesticide Handlers, Sprayers & Applicators

#### Farming, Fishing & Forestry

First-Line Supervisors of Farming, Fishing & Forestry Workers

Farm Equipment Mechanics & Service Technicians Life, Physical & Social Science

Installation, Maintenance & Repair

Agricultural & Food Science Technicians; Soil & Plant Scientists; Biochemists & Biophysicists; Food Scientists & Technologists; Foresters; Economists

Sales & Sales Related Retail Salespersons; First-Line Supervisors of Retail Sales Workers

#### **Agribusiness Systems Pathway**

Arts, Design, Entertainment, Sports & Media Graphic Designers, Audio & Video Equipment Technicians

**Life, Physical & Social Science** Food Scientists & Technologists Sales & Sales Related Sales Reps, Wholesale & Manufacturing, Technical & Scientific Products

Occupation

**Uccupation** 

#### Installation, Maintenance & Repair

Aircraft Mechanics & Service Technicians; Mobile Heavy Equipment Mechanics; Farm Equipment Mechanics & Service Technicians Sales & Sales Related Parts Salesperson



#### **DID YOU KNOW?**

**On the job, a Zoologist & Wildlife Biologist would:** Develop, or make recommendations on, management systems and plans for wildlife populations and habitat, consulting with stakeholders and the public at large to explore options.

Inventory or estimate plant and wildlife populations.

Inform and respond to public regarding wildlife and conservation issues, such as plant identification, hunting ordinances, and nuisance wildlife.

Source: P2C Career Explorer, engage.pathway2careers.com





**Top 10 High-Value Careers in New Mexico** For a complete list of careers within this cluster and to review occupations specific to your workforce region, visit <u>careerpathways-nm.com</u>.

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Forest and Conservation Technicians	Natural Resources Systems	Provide technical assistance regarding the conservation of soil, water, forests, or related natural resources. May compile data pertaining to size, content, condition, and other characteristics of forest tracts under the direction of foresters, or train and lead forest workers in forest propagation and fire prevention and suppression. May assist conservation scientists in managing, improving, and protecting rangelands and wildlife habitats.	3	RIE	111	\$35,480
First-Line Supervisors of Farming, Fishing, and Forestry Workers	Food Products and Processing Systems	Directly supervise and coordinate the activities of agricultural, forestry, aquacultural, and related workers.	3	ERC	61	\$36,750
Hazardous Materials Removal Workers	Environmental Service Systems	Identify, remove, pack, transport, or dispose of hazardous materials, including asbestos, lead-based paint, waste oil, fuel, transmission fluid, radioactive materials, or contaminated soil. Specialized training and certification in hazardous materials handling or a confined entry permit are generally required. May operate earth-moving equipment or trucks.	3	RC	60	\$48,040
Environmental Science and Protection Technicians, Including Health	Environmental Service Systems	Perform laboratory and field tests to monitor the environment and investigate sources of pollution, including those that affect health, under the direction of an environmental scientist, engineer, or other specialist. May collect samples of gases, soil, water, and other materials for testing.	4	IRC	57	\$47,310



Technology	Knowledge	Skills	Abilities
Data base user interface and query software Assisi Compiler; Microsoft Access Presentation software Corel Presentation; Microsoft PowerPoint Map creation software Ben Meadows Yeoman Expedition; Leica Geosystems ERDAS IMAGINE	Safety and Government public safety and security; law and government Arts and Humanities English language Business customer service management Math and Science geography	Basic Skills listening to others, not interrupting, and asking good questions; thinking about the pros and cons of different ways to solve a problem People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it Problem Solving noticing a problem and figuring out the best way to solve it	Verbal communicate by speaking; listen and understand what people say Ideas and Logic notice when problems happen; order or arrange things Hand and Finger Use hold or move items with your hands; keep your arm or hand steady Attention pay attention to something without being distracted
Spreadsheet software Microsoft Excel Presentation software Microsoft PowerPoint Data base user interface and query software Database software; Valley Agricultural Software DairyCOMP 30	Business management; customer service Manufactured or Agricultural Goods manufacture and distribution of products; food production Arts and Humanities English language Engineering and Technology mechanical	Basic Skills thinking about the pros and cons of different ways to solve a problem; keeping track of how well people and/or groups are doing in order to make improvements Problem Solving noticing a problem and figuring out the best way to solve it Social changing what is done based on other people's actions; teaching people how to do something	Verbal listen and understand what people say; communicate by speaking Ideas and Logic notice when problems happen; group things in different ways
Spreadsheet software Microsoft Excel Presentation software Microsoft PowerPoint Data base user interface and query software Database software; Xactware Xactimate	Safety and Government public safety and security Business management; customer service Transportation movement of people or goods by air, rail, sea, or road Engineering and Technology building and construction	Basic Skills keeping track of how well people and/or groups are doing in order to make improvements; thinking about the pros and cons of different ways to solve a problem Problem Solving noticing a problem and figuring out the best way to solve it	Verbal listen and understand what people say; communicate by speaking Ideas and Logic notice when problems happen; group things in different ways Hand and Finger Use keep your arm or hand steady; hold or move items with your hands Controlled Movement

#### Geographic information

**Business** 

customer service

English language

Math and Science

chemistry; biology

law and government

**Safety and Government** 

**Arts and Humanities** 

system ESRI ArcGIS software; ESRI ArcView Video creation and editing software YouTube Analytical or scientific software HEC-RAS; Visual OTTHYMO

#### Basic Skills

reading work related information; listening to others, not interrupting, and asking good questions

#### **Problem Solving**

noticing a problem and figuring out the best way to solve it

#### **People and Technology Systems**

thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it

#### Verbal

communicate by speaking; listen and understand what people say

quickly change the controls of a machine, car, truck or boat

#### Ideas and Logic

use rules to solve problems; make general rules or come up with answers from lots of detailed information

#### Math

add, subtract, multiply, or divide; choose the right type of math to solve a problem

Visual Understanding

see hidden patterns



High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Biological Technicians	Plant Systems	Assist biological and medical scientists. Set up, operate, and maintain laboratory instruments and equipment, monitor experiments, collect data and samples, make observations, and calculate and record results. May analyze organic substances, such as blood, food, and drugs.	4	RIC	40	\$39,150
Environmental Engineers	Environmental Service Systems	Research, design, plan, or perform engineering duties in the prevention, control, and remediation of environmental hazards using various engineering disciplines. Work may include waste treatment, site remediation, or pollution control technology.	4	IRC	24	\$99,750
Farm Equipment Mechanics and Service Technicians	Power, Structural and Technical Systems	Diagnose, adjust, repair, or overhaul farm machinery and vehicles, such as tractors, harvesters, dairy equipment, and irrigation systems.	3	RCI	24	\$47,120
Natural Sciences Managers	Natural Resources Systems	Plan, direct, or coordinate activities in such fields as life sciences, physical sciences, mathematics, statistics, and research and development in these fields.	5	EI	23	\$98,900

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		OLTORE, FOOD AND NAT	URAL RESOURCES
Technology	Knowledge	Skills	Abilities
Analytical or scientific software Laboratory information management system LIMS; SAS Presentation software Microsoft PowerPoint Graphics or photo imaging software Adobe Systems Adobe Photoshop; Graphics software	Math and Science biology; arithmetic, algebra, geometry, calculus, or statistics Arts and Humanities English language Engineering and Technology computers and electronics	<b>Basic Skills</b> reading work related information; thinking about the pros and cons of different ways to solve a problem <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it	Verbal listen and understand what people say; communicate by speaking Ideas and Logic make general rules or come up with answers from lots of detailed information; order or arrange things Math add, subtract, multiply, or divide; choose the right type of math to solve a problem
Analytical or scientific software Insightful S-PLUS; The MathWorks MATLAB Desktop communications software Eko Compliance software Material safety data sheet MSDS software; Regulatory compliance management software	Engineering and Technology product and service development; design Math and Science arithmetic, algebra, geometry, calculus, or statistics; chemistry Arts and Humanities English language Safety and Government law and government	Basic Skills listening to others, not interrupting, and asking good questions; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	Verbal read and understand what is written; communicate by speaking Ideas and Logic make general rules or come up with answers from lots of detailed information; use rules to solve problems Math add, subtract, multiply, or divide; choose the right type of math to solve a problem Visual Understanding see hidden patterns
Spreadsheet software Microsoft Excel Data base user interface and query software FarmLogic FarmPAD; ServiceMax Electronic mail software Microsoft Outlook	Engineering and Technology mechanical; computers and electronics Business customer service; management Arts and Humanities English language Math and Science arithmetic, algebra, geometry, calculus, or statistics	Basic Skills thinking about the pros and cons of different ways to solve a problem; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it Technical planning and doing the basic maintenance on equipment; repairing machines or systems using the right tools	Hand and Finger Use hold or move items with your hands; put together small parts with your fingers Controlled Movement quickly change the controls of a machine, car, truck or boat; use your arms and/or legs together while sitting, standing, or lying down Verbal listen and understand what people say; communicate by speaking Ideas and Logic notice when problems happen
Analytical or scientific software IBM SPSS Statistics; The MathWorks MATLAB Presentation software Microsoft PowerPoint Spreadsheet software IBM Lotus 1.2-3: Microsoft	Math and Science biology; chemistry Arts and Humanities English language Business management; administrative services Engineering and Technology	Basic Skills using scientific rules and strategies to solve problems; keeping track of how well people and/or groups are doing in order to make improvements Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems	Verbal read and understand what is written; communicate by speaking Ideas and Logic make general rules or come up with answers from lots of detailed information; order or arrange things Math

#### Math

choose the right type of math to solve a problem; add, subtract, multiply, or divide

IBM Lotus 1-2-3; Microsoft

Excel

computers and electronics

#### People and Technology Systems

thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it

**Engineering and Technology** 



High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Zoologists and Wildlife Biologists	Natural Resources Systems	Study the origins, behavior, diseases, genetics, and life processes of animals and wildlife. May specialize in wildlife research and management. May collect and analyze biological data to determine the environmental effects of present and potential use of land and water habitats.	5	IR	17	\$55,590
Soil and Plant Scientists	Plant Systems	Conduct research in breeding, physiology, production, yield, and management of crops and agricultural plants or trees, shrubs, and nursery stock, their growth in soils, and control of pests; or study the chemical, physical, biological, and mineralogical composition of soils as they relate to plant or crop growth. May classify and map soils and investigate effects of alternative practices on soil and crop productivity.	5	IR	12	\$78,560

#### **Data Sources:**

- The list of High-Value Occupations have been derived by analysis of the data from the U.S. Department of Labor, Employment and Training Administration (USDOL/ETA) and New Mexico Workforce Connection.
- Detailed descriptors such as Technology, Knowledge, Skills, Abilities have been taken from mynextmove.org which is powered by O\*NET
- Additional information on occupations within this cluster can be found at engage.pathway2careers.com



Technology	Knowledge	Skills	Abilities
Geographic information system ESRI ArcGIS software; Geographic information system GIS software Presentation software Microsoft PowerPoint Analytical or scientific software SAS; Statistical software	Math and Science biology; arithmetic, algebra, geometry, calculus, or statistics Arts and Humanities English language Business customer service; management Safety and Government law and government	Basic Skills listening to others, not interrupting, and asking good questions; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	Verbal communicate by speaking; communicate by writing Ideas and Logic make general rules or come up with answers from lots of detailed information; use rules to solve problems Attention pay attention to something without being distracted; do two or more things at the same time Math add, subtract, multiply, or divide
Analytical or scientific software STATISTICA; Water Erosion Prediction Project WEPP Presentation software Microsoft PowerPoint Data base user interface and query software Microsoft Access; SoilVision Systems SVOFFICE	Math and Science biology; chemistry Arts and Humanities English language Engineering and Technology computers and electronics; product and service development Education and Training teaching and course design	Basic Skills figuring out how to use new ideas or things; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	Verbal communicate by speaking; communicate by writing Ideas and Logic group things in different ways; make general rules or come up with answers from lots of detailed information Math add, subtract, multiply, or divide; choose the right type of math to solve a problem Visual Understanding see hidden patterns



#### **Career Cluster Map**

The P2C Career Cluster Maps provide an overview of regional high-demand occupations associated with various job zones (i.e., levels of education and training). The purpose of these maps is to assist educators and students in developing awareness of entry and exit points within a particular career field. In using this information, educators and students can quickly gain a sense of potential high-value career opportunities and the level of education and training needed to prepare for these professions. This can promote the alignment of education practices with regional careers and assist students in making informed career decisions that take into account regional labor market demands.

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
Farmworkers and Laborers, Crop, Nursery, and Greenhouse Annual Openings = 617 Median Wage = \$22,550	<b>Farmworkers, Farm, Ranch,</b> <b>and Aquacultural Animals</b> Annual Openings = 398 Median Wage = \$32,300	<b>Forest and Conservation</b> <b>Technicians</b> Annual Openings = 111 Median Wage = \$35,480	<b>Environmental Science and</b> <b>Protection Technicians</b> Annual Openings = 57 Median Wage = \$47,310	<b>Natural Sciences Managers</b> Annual Openings = 23 Median Wage = \$98,900
<b>Agricultural Equipment Operators</b> Annual Openings = 128 Median Wage = \$29,810	<b>Animal Caretakers</b> Annual Openings = 345 Median Wage = \$27,340	Water and Wastewater Treatment Plant and System Operators Annual Openings = 111 Median Wage = \$46,590	<b>Biological Technicians</b> Annual Openings = 40 Median Wage = \$39,150	<b>Zoologists and Wildlife</b> <b>Biologists</b> Annual Openings = 17 Median Wage = \$55,590
<b>Graders and Sorters,</b> <b>Agricultural Products</b> Annual Openings = 18 Median Wage = \$24,440	<b>Refuse and Recyclable</b> <b>Material Collectors</b> Annual Openings = 86 Median Wage = \$36,330	First-Line Supervisors of Farming, Fishing and Forestry Workers Annual Openings = 61 Median Wage = \$36,750	<b>Environmental Engineers</b> Annual Openings = 24 Median Wage = \$99,750	<b>Soil and Plant Scientists</b> Annual Openings = 12 Median Wage = \$78,560
<b>Agricultural Workers, All Other</b> Annual Openings = 10 Median Wage = \$29,820	Pesticide Handlers, Sprayers, and Applicators, Vegetation Annual Openings = 11 Median Wage = \$33,890	Hazardous Materials Removal Workers Annual Openings = 60 Median Wage = \$48,040	<b>Foresters</b> Annual Openings = 9 Median Wage = \$67,200	*
*	<b>Pest Control Workers</b> Annual Openings = *** Median Wage = \$37,400	<b>Farm Equipment Mechanics</b> <b>and Service Technicians</b> Annual Openings = 24 Median Wage = \$47,120	Environmental Engineering Technologists and Technicians Annual Openings = 5 Median Wage = \$59,710	*

\* There are no occupations in this Job Zone for this cluster.

**Data Sources** Aligned with O\*NET job zone classification system



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## **Architecture & Construction**

New York's recently completed Freedom Tower took 10 years to build. Who designed and constructed it? You're probably not surprised to learn that architects, civil engineers, construction laborers, cement masons, concrete finishers, and structural iron and steel workers participated in its development. You've also likely thought about the elevator installers and repairers who installed 73 elevators, or about the HVAC mechanics and installers, plumbers, and electricians who created a healthy environment inside the tallest building in the Western Hemisphere.

Think a bit more deeply and you'll realize that cost estimators and operations research analysts used their mathematical and analytic skills to help make decisions about the nearly \$4 billion spent to construct the building. People in management positions coordinated the work of specialty trade contractors to ensure they provided quality work in a timely manner.

While New Mexico may not build a skyscraper the size of the Freedom Tower any time soon, the state's construction industry is expected to grow and show increases in the occupations mentioned above. These occupations require educational backgrounds that range from high school diplomas to graduate degrees. Workers may find employment with plumbing, heating and air conditioning contractors landscaping businesses; electrical contractors; federal, state, and local government; and commercial building companies.

## **Core Skills**

- Repairing
- Equipment Maintenance
- Installation
- Equipment Selection
- Operation & Control

- Troubleshooting
- Quality Control Analysis
- Technology Design
- Management of Material Resources

## **Career Pathways and Occupations**

#### Design/Pre-Construction Pathway

#### Architects, Except Landscape and Naval

Civil Engineers; Civil Engineering Technicians; Architects, Except Landscape & Naval; Surveying & Mapping Technicians; Architectural & Civil Drafters; Other Engineers; Mechanical Drafters; Surveyors; Other Engineering Technicians; Electrical & Electronics Drafters; Cartographers & Photogrammetrists; Landscape Architects

#### Arts, Design, Entertainment, Sports & Media

Interior Designers

#### **Construction Pathway**

Architecture & Engineering Other Engineering Technicians

#### **Cost Estimators**

Prepare cost estimates for product manufacturing, construction projects, or services to aid management in bidding on or determining price of product or service. May specialize according to particular service performed or type of product manufactured.

#### **Construction Laborers**

Perform tasks involving physical labor at construction sites. May operate hand and power tools of all types: air hammers, earth tampers, cement mixers, small mechanical hoists, surveying and measuring equipment, and a variety of other equipment and instruments. May clean and prepare sites, dig trenches, set braces to support the sides of excavations, erect scaffolding, and clean up rubble, debris and other waste materials. May assist other craft workers.

#### Installation, Maintenance & Repair

Maintenance & Repair Workers, General; Heating, Air Conditioning & Refrigeration Mechanics & Installers; Helpers – Installation, Maintenance & Repair Workers; Electrical Power-Line Installers & Repairers; Security & Fire Alarm System Installers; Electrical & Electronics Repairers; Powerhouse, Substation & Relay Riggers

#### **Computer & Mathematical**

Software Developers, Systems Software; Operations Research Analysts

Education, Training & Library Engineering Teachers, Postsecondary

Management Architectural & Engineering Managers

Education, Training & Library Postsecondary Sociology Teachers

Life, Physical & Social Science Sociologists; Other Social Scientists & Related Workers

#### Management

Construction Managers; Project Managers

#### Production

Woodworking Machine Setters, Operators & Tenders, Except Sawing; Welding, Soldering & Brazing Machine Setters, Operators & Tenders; Structural Metal Fabricators & Fitters; Electromechanical Equipment Assemblers; Stationary Engineers & Boiler Operators

#### **Transportation & Material Moving**

Excavating & Loading Machine & Dragline Operators; Crane & Tower Operators; Conveyor Operators & Tenders; Commercial Pilots; Railroad Conductors & Yardmasters



## **Career Pathways and Occupations**

#### Maintenance/Operations Pathway

Building & Grounds Cleaning & Maintenance Landscaping & Groundskeeping Workers

#### **Construction & Extraction**

Highway Maintenance Workers; Other Construction & Related Workers

#### Heating, Air Conditioning, and Refrigeration Mechanics and Installers Install or repair heating, central air conditioning, or refrigeration systems,

including oil burners, hot-air furnaces, and heating stoves.

#### Production

Stationary Engineers & Boiler Operators



#### **DID YOU KNOW?**

**On the job, an Electrician would:** Prepare sketches or follow blueprints to determine the location of wiring or equipment and to ensure conformance to building and safety codes.

Place conduit, pipes, or tubing, inside designated partitions, walls, or other concealed areas, and pull insulated wires or cables through the conduit to complete circuits between boxes.

Work from ladders, scaffolds, or roofs to install, maintain, or repair electrical wiring, equipment, or fixtures.

Source: P2C Career Explorer, engage.pathway2careers.com





**Top 10 High-Value Careers in New Mexico** For a complete list of careers within this cluster and to review occupations specific to your workforce region, visit <u>careerpathways-nm.com</u>.

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
First-Line Supervisors of Construction Trades and Extraction Workers	Construction	Directly supervise and coordinate activities of construction or extraction workers.	3	ERC	796	\$61,810
Electricians	Construction	Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems.	3	RIC	542	\$49,820
Operating Engineers and Other Construction Equipment Operators	Construction	Operate one or several types of power construction equipment, such as motor graders, bulldozers, scrapers, compressors, pumps, derricks, shovels, tractors, or front- end loaders to excavate, move, and grade earth, erect structures, or pour concrete or other hard surface pavement. May repair and maintain equipment in addition to other duties.	2	RCI	508	\$47,420
Roustabouts, Oil and Gas	Construction	Assemble or repair oil field equipment using hand and power tools. Perform other tasks as needed.	1	R	491	\$37,610



Technology	Knowledge	Skills	Abilities
Project management software Microsoft Project; Oracle Primavera Enterprise Project Portfolio Management Presentation software Microsoft PowerPoint Data base user interface and query software Mi-Co Mi-Forms; Sage 300 Construction and Real Estate	Business management; customer service Engineering and Technology building and construction; mechanical Arts and Humanities English language Safety and Government public safety and security	Basic Skills listening to others, not interrupting, and asking good questions; talking to others Social changing what is done based on other people's actions; understanding people's reactions Problem Solving noticing a problem and figuring out the best way to solve it	Verbal listen and understand what people sa communicate by speaking Ideas and Logic notice when problems happen; order arrange things Attention pay attention to something without be distracted; do two or more things at t same time Hand and Finger Use hold or move items with your hands
Word processing software Microsoft Word; Socrates Contractor's Library Analytical or scientific software Construction Master Pro; SoftEmpire Electrical Calculations	Engineering and Technology building and construction; mechanical Business management; customer service	Basic Skills listening to others, not interrupting, and asking good questions; talking to others Problem Solving noticing a problem and figuring out the best way to solve it Basele and Tasbaeleau Systems	Hand and Finger Use put together small parts with your fin- keep your arm or hand steady Ideas and Logic notice when problems happen; make general rules or come up with answer from lots of detailed information Verbal

Data base user interface and query software

Database software; Shafer Service Systems

## service Math and Science

arithmetic, algebra, geometry, calculus, or statistics

**Engineering and Technology** 

**Arts and Humanities** 

Safety and Government

public safety and security

English language

mechanical

## People and Technology Systems

thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it

#### Spreadsheet software

Microsoft Excel Electronic mail software Microsoft Outlook Facilities management software

Maintenance record software

#### **Basic Skills**

keeping track of how well people and/or groups are doing in order to make improvements; listening to others, not interrupting, and asking good questions

#### **Problem Solving**

noticing a problem and figuring out the best way to solve it

#### **Basic Skills**

thinking about the pros and cons of different ways to solve a problem; keeping track of how well people and/or groups are doing in order to make improvements

the best way to solve it

#### Problem Solving

noticing a problem and figuring out

ay;

er or

being the

ngers;

#### erba

listen and understand what people say; communicate by speaking

#### Attention

pay attention to something without being distracted

#### **Controlled Movement**

quickly change the controls of a machine, car, truck or boat; use your arms and/or legs together while sitting, standing, or lying down

#### Hand and Finger Use

keep your arm or hand steady; hold or move items with your hands

#### Vision

decide which thing is closer or farther away from you or decide how far away it is from you; see details up close

#### Attention

do two or more things at the same time

#### Hand and Finger Use

hold or move items with your hands; keep your arm or hand steady

#### **Controlled Movement**

use your arms and/or legs together while sitting, standing, or lying down; quickly change the controls of a machine, car, truck or boat

#### Endurance

exercise for a long time without getting out of breath

#### Enterprise resource planning ERP software Maintenance software; SAP software

Presentation software

Microsoft PowerPoint

#### **Operating system software** Microsoft Windows; Microsoft Windows XP

**Engineering and Technology** mechanical **Business** customer service



High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Carpenters	Construction	Construct, erect, install, or repair structures and fixtures made of wood and comparable materials, such as concrete forms; building frameworks, including partitions, joists, studding, and rafters; and wood stairways, window and door frames, and hardwood floors. May also install cabinets, siding, drywall, and batt or roll insulation. Includes brattice builders who build doors or brattices (ventilation walls or partitions) in underground passageways.	2	RCI	411	\$44,860
Service Unit Operators, Oil and Gas	Construction	Operate equipment to increase oil flow from producing wells or to remove stuck pipe, casing, tools, or other obstructions from drilling wells. Includes fishing-tool technicians.	2	RCI	354	\$61,850
Plumbers, Pipefitters, and Steamfitters	Construction	Assemble, install, alter, and repair pipelines or pipe systems that carry water, steam, air, or other liquids or gases. May install heating and cooling equipment and mechanical control systems. Includes sprinkler fitters.	3	RCI	316	\$47,120
Construction Managers	Construction	Plan, direct, or coordinate, usually through subordinate supervisory personnel, activities concerned with the construction and maintenance of structures, facilities, and systems. Participate in the conceptual development of a construction project and oversee its organization, scheduling, budgeting, and implementation. Includes managers in specialized construction fields, such as carpentry or plumbing.	4	ERC	226	\$90,690

Technology	Knowledge	Skills	Abilities
<b>Accounting software</b> Intuit QuickBooks; Quicken <b>Project management software</b> Turtle Creek Software Goldenseal; VirtualBoss <b>Word processing software</b> Microsoft Word; Wilhelm Publishing Threshold	Engineering and Technology building and construction; design Business management; customer service Math and Science arithmetic, algebra, geometry, calculus, or statistics; physics Safety and Government public safety and security	Basic Skills keeping track of how well people and/or groups are doing in order to make improvements; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it	Hand and Finger Use hold or move items with your hands; put together small parts with your fingers Ideas and Logic notice when problems happen; order or arrange things Spatial imagine how something will look after it is moved around or changed Physical Strength use your lower back and stomach
Spreadsheet software Microsoft Excel Presentation software Microsoft PowerPoint Enterprise resource planning ERP software SAP software	Engineering and Technology mechanical; product and service development Math and Science arithmetic, algebra, geometry, calculus, or statistics; chemistry Business customer service; sales and marketing Safety and Government public safety and security	Basic Skills thinking about the pros and cons of different ways to solve a problem; keeping track of how well people and/or groups are doing in order to make improvements Problem Solving noticing a problem and figuring out the best way to solve it	Hand and Finger Use keep your arm or hand steady; hold or move items with your hands Controlled Movement quickly change the controls of a machine, car, truck or boat; use your arms and/or legs together while sitting, standing, or lying down Attention pay attention to something without being distracted; do two or more things at the same time Hearing and Speech tell the difference between sounds
Accounting software Bookkeeping software; Intuit QuickBooks Analytical or scientific software Bentley Systems AutoPIPE; Watter Hammer Software Hytran Computer aided design CAD software Drawing and drafting software; ViziFlow	Engineering and Technology building and construction; mechanical Math and Science arithmetic, algebra, geometry, calculus, or statistics; physics Business customer service; management Safety and Government public safety and security	Basic Skills thinking about the pros and cons of different ways to solve a problem; keeping track of how well people and/or groups are doing in order to make improvements People and Technology Systems thinking about the pros and cons of different options and picking the best one Problem Solving noticing a problem and figuring out the best way to solve it	Hand and Finger Use put together small parts with your fingers; hold or move items with your hands Ideas and Logic notice when problems happen; use rules to solve problems Physical Strength use your lower back and stomach; exercise for a long time without your muscles getting tired Spatial imagine how something will look after it is moved around or changed
Data base user interface and query software Database software; Yardi software Cloud-based data access and sharing software Dropbox; Microsoft SharePoint Project management software HCSS HeavyJob; Oracle Primavera Enterprise Project Portfolio Management	Engineering and Technology building and construction; product and service development Business management; customer service Arts and Humanities English language Math and Science arithmetic, algebra, geometry, calculus, or statistics	Basic Skills keeping track of how well people and/or groups are doing in order to make improvements; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it Resource Management selecting and managing the best workers for a job; managing your time and the time of other people	Verbal communicate by speaking; listen and understand what people say Ideas and Logic order or arrange things; notice when problems happen Visual Understanding see hidden patterns; quickly compare groups of letters, numbers, pictures, or other things Math add, subtract, multiply, or divide



High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Highway Maintenance Workers	Maintenance/ Operations	Maintain highways, municipal and rural roads, airport runways, and rights-of-way. Duties include patching broken or eroded pavement and repairing guard rails, highway markers, and snow fences. May also mow or clear brush from along road, or plow snow from roadway.	2	RC	182	\$36,940
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	Maintenance/ Operations	Install or repair heating, central air conditioning, HVAC, or refrigeration systems, including oil burners, hot-air furnaces, and heating stoves.	3	RCI	177	\$46,640

#### **Data Sources:**

- The list of High-Value Occupations have been derived by analysis of the data from the U.S. Department of Labor, Employment and Training Administration (USDOL/ETA) and New Mexico Workforce Connection.
- Detailed descriptors such as Technology, Knowledge, Skills, Abilities have been taken from mynextmove.org which is powered by O\*NET
- Additional information on occupations within this cluster can be found at engage.pathway2careers.com

Technology	Knowledge	Skills	Abilities
<b>Spreadsheet software</b> Microsoft Excel <b>Presentation software</b> Microsoft PowerPoint <b>Word processing software</b> Microsoft Word	Safety and Government public safety and security Arts and Humanities English language Transportation movement of people or goods by air, rail, sea, or road Engineering and Technology building and construction	<b>Basic Skills</b> keeping track of how well people and/or groups are doing in order to make improvements; listening to others, not interrupting, and asking good questions <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it	Controlled Movement quickly change the controls of a machine car, truck or boat; use your arms and/or legs together while sitting, standing, or lying down Hand and Finger Use keep your arm or hand steady; hold or move items with your hands Endurance exercise for a long time without getting out of breath Attention pay attention to something without being distracted
Electronic mail software IBM Notes; Microsoft Outlook Presentation software Microsoft PowerPoint Facilities management software Computerized maintenance management system CMMS; ManagerPlus	Engineering and Technology mechanical; building and construction Business customer service; management Arts and Humanities English language Safety and Government public safety and security	Basic Skills thinking about the pros and cons of different ways to solve a problem; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	Hand and Finger Use keep your arm or hand steady; put together small parts with your fingers Ideas and Logic notice when problems happen; use rules to solve problems Verbal listen and understand what people say; communicate by speaking



#### **Career Cluster Map**

The P2C Career Cluster Maps provide an overview of regional high-demand occupations associated with various job zones (i.e., levels of education and training). The purpose of these maps is to assist educators and students in developing awareness of entry and exit points within a particular career field. In using this information, educators and students can quickly gain a sense of potential high-value career opportunities and the level of education and training needed to prepare for these professions. This can promote the alignment of education practices with regional careers and assist students in making informed career decisions that take into account regional labor market demands.

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
<b>Landscaping and</b> <b>Groundskeeping Workers</b> Annual Openings = 830 Median Wage = \$30,310	<b>Construction Laborers</b> Annual Openings = 1413 Median Wage = \$34,990	First-Line Supervisors of Construction Trades and Extraction Workers Annual Openings = 796 Median Wage = \$61,810	<b>Construction Managers</b> Annual Openings = 226 Median Wage = \$90,690	<b>Architects, Except</b> <b>Landscape and Naval</b> Annual Openings = 41 Median Wage = \$74,770
<b>Roustabouts, Oil and Gas</b> Annual Openings = 491 Median Wage = \$37,610	<b>Operating Engineers and</b> <b>Other Construction</b> <b>Equipment Operators</b> Annual Openings = 508 Median Wage = \$47,420	<b>Electricians</b> Annual Openings = 542 Median Wage = \$49,820	<b>Civil Engineers</b> Annual Openings = 123 Median Wage = \$88,360	*
<b>Cement Masons and</b> <b>Concrete Finishers</b> Annual Openings = 101 Median Wage = \$39,10 <b>0</b>	<b>Carpenters</b> Annual Openings = 411 Median Wage = \$44,860	<b>Plumbers, Pipefitters, and Steamfitters</b> Annual Openings = 316 Median Wage = \$47,120	<b>Cost Estimators</b> Annual Openings = 92 Median Wage = \$58,810	*
<b>Derrick Operators, Oil and Gas</b> Annual Openings = 96 Median Wage = \$59,740	<b>Service Unit Operators, Oil and Gas</b> Annual Openings = 354 Median Wage = \$61,850	Heating, Air Conditioning, and Refrigeration Mechanics and Installers Annual Openings = 177 Median Wage = \$46,640	<b>Surveyors</b> Annual Openings = 26 Median Wage = \$58,430	*
<b>Plasterers and Stucco</b> <b>Masons</b> Annual Openings = 30 Median Wage = \$37,020	<b>Highway Maintenance Workers</b> Annual Openings = 182 Median Wage = \$36,940	<b>Surveying and Mapping Technicians</b> Annual Openings = 118 Median Wage = \$46,700	<b>Interior Designers</b> Annual Openings = 17 Median Wage = \$43,650	*

\* There are no occupations in this Job Zone for this cluster.



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## Arts, Audio/Video Technology & Communications

Cultural and leisure activities help us balance our work and personal lives. In Arts, Audio/Video Technology and Communications, a great variety of people work to give us movies, paintings, music downloads, books, and museums. Actors, artists, musicians, writers, and archivists obviously make their living in jobs that are part of this cluster. Less evident are the employees who work in the background at occupations like set designers, agents and business managers, audio and video equipment technicians, print binding and finishing workers, and historians.

> As in many clusters, technology has required workers to learn new skills. Lighting and sound systems are quite different than they were even a decade ago, providing new multi-media options for staging performances and exhibits. Publishers use technologies to create e-books that are far different from those used for print versions.

> > Most occupations in the Arts, Audio/Video Technology and Communications cluster are expected to show average or less growth in the next decade, but several careers do show strong growth. Among them are technical writers, telecommunications line installers and repairers, interior designers, and audio and video equipment technicians. However, in New Mexico, the Film and **Television Industry continues** to hire local talent for all levels of production, including technical, skilled, and managerial positions.. Approximately two thirds of the careers in this industry require postsecondary education, particularly a bachelor's degree. Industries that often have employment for this cluster's workers include wired telecommunication companies, newspaper publishers (print and electronic), commercial printing companies, television stations, and electrical contractors.

## Core Skills

- Equipment Knowledge
- Technology Design
- Time Management
- Installation
- Operations Analysis
- Active Learning/Listening

- Reading Comprehension
- Coordination
- Persuasion
- Resume Building
- Communication
- Professional Networking

### **Career Pathways and Occupations**

#### **Production & Managerial Arts Pathway**

#### Arts, Design, Entertainment, Sports & Media

Graphic Designers; Photographers; Multimedia Artists & Animators; Audio & Video Equipment Technicians; Commercial & Industrial Designers; Other Media & Communication Workers; Broadcast Technicians; Craft Artists; Fine Artists, Including Painters, Sculptors & Illustrators. Other Media & Communication Workers; Broadcast Technicians

#### Computer & Mathematical

Computer Programmers

#### **Education, Training & Library**

Art, Drama & Music Teachers, Postsecondary; Curators

#### Management

Technical Directors/Managers

#### Installation, Maintenance & Repair

Telecommunications Equipment Installers & Repairers, Except Line Installers; Computer, Automated Teller & Office Machine Repairers; Telecommunications Line Installers & Repairers

#### Media and Design Arts

#### Arts, Design, Entertainment, Sports & Media

Graphic Designers; Photographers; Multimedia Artists & Animators; Interior Designers; Art Directors; Commercial & Industrial Designers; Craft Artists; Fine Artists, Including Painters, Sculptors & Illustrators; Photographers; Writers & Authors; Editors; Producers & Directors; Audio & Video Equipment Technicians; Technical Writers; Radio & Television Announcers; Other Media & Communication Workers; Broadcast Technicians

#### Virtual Reality

Graphic Designers; Photographers; Multimedia Artists & Animators

#### Education, Training & Library

Art, Drama & Music Teachers; Other Postsecondary Teachers; English Language & Literature Teachers, Postsecondary; Communications Teachers, Postsecondary; Career/Technical Education Teachers, Secondary School; Vocational Education Teacher, Postsecondary

#### Production

Photographic Process Workers & Processing Machine Operators; Painting, Coating & Decorating Workers; Printing Press Operators; Print Binding & Finishing Workers; Printing Press Operators; Print Binding & Finishing Workers


## **Career Pathways and Occupations**

### Performing Arts Pathway

### Arts, Design, Entertainment, Sports & Media

Writers & Authors; Musicians & Singers; Producers & Directors; Other Entertainers & Performers, Sports & Related Workers; Craft Artists; Fine Artists, including Painters, Sculptors & Illustrators

### Education, Training & Library

Art, Drama & Music Teachers, Postsecondary

Management

Agents & Business Managers

Transportation & Material Moving Manual Laborers & Freight, Stock & Material Movers



### **DID YOU KNOW?**

**On the job, a Graphic Designer would:** Key information into computer equipment to create layouts for client or supervisor.

Review final layouts and suggest improvements, as needed.

Determine size and arrangement of illustrative material and copy, and select style and size of type.

Source: P2C Career Explorer, engage.pathway2careers.com



**Top 10 High-Value Careers in New Mexico** For a complete list of careers within this cluster and to review occupations specific to your workforce region, visit <u>careerpathways-nm.com</u>.

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Producers and Directors	Performing Arts	Produce or direct stage, television, radio, video, or film productions for entertainment, information, or instruction. Responsible for creative decisions, such as interpretation of script, choice of actors or guests, set design, sound, special effects, and choreography.	4	EAS	125	\$100,640
Graphic Designers	Visual Arts	Design or create graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. May use a variety of mediums to achieve artistic or decorative effects.	4	ARE	92	\$38,590
Telecommunications Equipment Installers and Repairers, Except Line Installers	Telecommunications	Install, set up, rearrange, or remove switching, distribution, routing, and dialing equipment used in central offices or headends. Service or repair telephone, cable television, Internet, and other communications equipment on customers' property. May install communications equipment or communications wiring in buildings.	3	RIC	83	\$58,430



Technology	Knowledge	Skills	Abilities
Video creation and editing software Adobe Systems Adobe After Effects; YouTube Web page creation and editing software Facebook; LinkedIn Music or sound editing software Adobe Systems Adobe Audition; Magix Vegas Pro	Communications multimedia; telecommunications Arts and Humanities English language Engineering and Technology computers and electronics Business management	Basic Skillslistening to others, not interrupting, andasking good questions; keeping track ofhow well people and/or groups are doing inorder to make improvementsPeople and Technology Systemsfiguring out how a system should workand how changes in the future will affectit; thinking about the pros and cons ofdifferent options and picking the best oneProblem Solvingnoticing a problem and figuring out the bestway to solve it	Verbal communicate by speaking; listen and understand what people say Ideas and Logic use rules to solve problems; notice when problems happen Visual Understanding see hidden patterns; quickly know what you are looking at Attention do two or more things at the same time
Web platform development software AJAX; Oracle JavaServer Pages JSP Video creation and editing software Adobe Systems Adobe After Effects; YouTube Computer aided design CAD software Autodesk AutoCAD Civil 3D; Autodesk Revit	Engineering and Technology design; computers and electronics Arts and Humanities music, dance, visual arts, drama, or sculpture; English language Communications multimedia Business sales and marketing	Basic Skills listening to others, not interrupting, and asking good questions; talking to others Problem Solving noticing a problem and figuring out the best way to solve it Social changing what is done based on other people's actions; understanding people's reactions	Verbal read and understand what is written; listen and understand what people say Ideas and Logic create new and original ideas; come up with lots of ideas
<b>Spreadsheet software</b> Microsoft Excel <b>Presentation software</b> Microsoft PowerPoint <b>Analytical or scientific software</b> Fluke ClearSight Analyzer; Fluke Networks TechAdvisor Field Access System	Business customer service Communications telecommunications Engineering and Technology computers and electronics; mechanical Arts and Humanities English language	Basic Skills thinking about the pros and cons of different ways to solve a problem; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	Hand and Finger Use keep your arm or hand steady; hold or move items with your hands Ideas and Logic notice when problems happen; make general rules or come up with answers from lots of detailed information Verbal listen and understand what people say; communicate by speaking Visual Understanding see hidden patterns



High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Audio and Video Technicians	Journalism and Broadcasting	Set up, maintain, and dismantle audio and video equipment, such as microphones, sound speakers, connecting wires and cables, sound and mixing boards, video cameras, video monitors and servers, and related electronic equipment for live or recorded events, such as concerts, meetings, conventions, presentations, podcasts, news conferences, and sporting events.	3	RIC	66	\$44,000
Technical Writers	Journalism and Broadcasting	Write technical materials, such as equipment manuals, appendices, or operating and maintenance instructions. May assist in layout work.	4	AIC	64	\$65,820
Set and Exhibit Designers	Visual Arts	Design special exhibits and sets for film, video, television, and theater productions. May study scripts, confer with directors, and conduct research to determine appropriate architectural styles.	5	AR	57	\$47,620
News Analysts, Reporters, and Journalists	Journalism and Broadcasting	Narrate or write news stories, reviews, or commentary for print, broadcast, or other communications media such as newspapers, magazines, radio, or television. May collect and analyze information through interview, investigation, or observation.	4	AEI	35	\$39,240



Technology	Knowledge	Skills	Abilities
Video creation and editing software Adobe Systems Adobe After Effects; YouTube Graphics or photo imaging software Adobe Systems Adobe Illustrator; Adobe Systems Adobe Photoshop Operating system software Linux; Microsoft Windows	Engineering and Technology computers and electronics; product and service development Communications multimedia; telecommunications Arts and Humanities English language; music, dance, visual arts, drama, or sculpture Business customer service	Basic Skills keeping track of how well people and/ or groups are doing in order to make improvements; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it	Verbal communicate by speaking; listen and understand what people say Ideas and Logic notice when problems happen; order or arrange things Attention pay attention to something without being distracted; do two or more things at the same time Hand and Finger Use keep your arm or hand steady
Microsoft ASP.NET; Oracle JavaServer Pages JSP Web page creation and editing software Adobe Systems Adobe Dreamweaver; Google Sites Graphics or photo imaging software	Arts and Humanities English language Engineering and Technology computers and electronics Business administrative services; management Communications multimedia	<b>Basic Skills</b> writing things for co-workers or customers, reading work related information <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it	<b>Verbal</b> communicate by writing; read and understand what is written <b>Ideas and Logic</b> use rules to solve problems; order of arrange things
Computer aided design CAD software Autodesk Revit; Trimble SketchUp Pro Presentation software Microsoft PowerPoint Video creation and editing software Adobe Systems Adobe After Effects; Autodesk 3ds Max	Arts and Humanities music, dance, visual arts, drama, or sculpture; history and archeology Engineering and Technology design; computers and electronics Communications multimedia Manufactured or Agricultural Goods manufacture and distribution of products	Basic Skills listening to others, not interrupting, and asking good questions; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	Verbal listen and understand what people say; read and understand what is written Ideas and Logic come up with lots of ideas; create new and original ideas
Adobe Systems Adobe After Effects; YouTube Data base user interface and query software Microsoft Access; Microsoft SQL Server Web page creation and editing software	Arts and Humanities English language Communications multimedia; telecommunications Safety and Government law and government Engineering and Technology computers and electronics	Basic Skills listening to others, not interrupting, and asking good questions; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it Social understanding people's reactions; changing what is done based on other people's actions	Verbal communicate by speaking; listen and understand what people say Ideas and Logic make general rules or come up with answers from lots of detailed information; create new and origina ideas



High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Writers and Authors	Journalism and Broadcasting	Originate and prepare written material, such as scripts, stories, advertisements, and other material.	4	EAC	35	\$62,820
Editors	Journalism and Broadcasting	Plan, coordinate, revise, or edit written material. May review proposals and drafts for possible publication.	4	AEC	33	\$46,920
Fine Artists, Including Painters, Sculptors, and Illustrators	Visual Arts	Create original artwork using any of a wide variety of media and techniques.	3	AR	33	\$47,440

### **Data Sources:**

- The list of High-Value Occupations have been derived by analysis of the data from the U.S. Department of Labor, Employment and Training Administration (USDOL/ETA) and New Mexico Workforce Connection.
- Detailed descriptors such as Technology, Knowledge, Skills, Abilities have been taken from mynextmove.org which is powered by O\*NET
- Additional information on occupations within this cluster can be found at engage.pathway2careers.com

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Technology	Knowledge	Skills	Abilities
Video creation and editing software Adobe Systems Adobe After Effects; YouTube Web page creation and editing software LinkedIn; WordPress Cloud-based data access and sharing software Microsoft SharePoint; Slack	Business sales and marketing; customer service Communications multimedia Engineering and Technology computers and electronics	Basic Skills writing things for co-workers or customers; reading work related information Social changing what is done based on other people's actions; talking people into changing their minds or their behavior Problem Solving noticing a problem and figuring out the best way to solve it	<b>Verbal</b> communicate by writing; read and understand what is written <b>Ideas and Logic</b> come up with lots of ideas; create new and original ideas
Word processing software Google Docs; Microsoft Word Web page creation and editing software LinkedIn; WordPress Desktop publishing software Adobe Systems Adobe InDesign; Microsoft Publisher	Arts and Humanities English language Communications multimedia Business management; administrative services Education and Training teaching and course design	Basic Skills reading work related information; writing things for co-workers or customers <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it	Verbal read and understand what is written; communicate by writing Ideas and Logic come up with lots of ideas; group things in different ways
Graphics or photo imaging software Adobe Systems Adobe Creative Cloud software; Adobe Systems Adobe Photoshop Instant messaging software GroupMe; Twitter Computer aided design CAD software Autodesk AutoCAD; Trimble SketchUp Pro	Engineering and Technology design; computers and electronics Arts and Humanities English language; music, dance, visual arts, drama, or sculpture Manufactured or Agricultural Goods manufacture and distribution of products Education and Training teaching and course design	Basic Skills figuring out how to use new ideas or things; thinking about the pros and cons of different ways to solve a problem Problem Solving noticing a problem and figuring out the best way to solve it	Hand and Finger Use keep your arm or hand steady; hold or move items with your hands Ideas and Logic create new and original ideas; come up with lots of ideas Verbal listen and understand what people say; communicate by speaking

### **Career Cluster Map**

The P2C Career Cluster Maps provide an overview of regional high-demand occupations associated with various job zones (i.e., levels of education and training). The purpose of these maps is to assist educators and students in developing awareness of entry and exit points within a particular career field. In using this information, educators and students can quickly gain a sense of potential high-value career opportunities and the level of education and training needed to prepare for these professions. This can promote the alignment of education practices with regional careers and assist students in making informed career decisions that take into account regional labor market demands.

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
*	<b>Printing Press Operators</b> Annual Openings = 34 Median Wage = \$29,460	Telecommunications Equipment Installers and Repairers, Except Line Installers Annual Openings = 83 Median Wage = \$58,430	<b>Producers and Directors</b> Annual Openings = 125 Median Wage = \$100,640	<b>Set and Exhibit Designers</b> Annual Openings = 57 Median Wage = \$47,620
*	<b>Floral Designers</b> Annual Openings = 20 Median Wage = \$29,550	<b>Audio and Video Technicians</b> Annual Openings = 66 Median Wage = \$44,000	<b>Graphic Designers</b> Annual Openings = 92 Median Wage = \$38,590	*
*	<b>Telecommunications Line</b> <b>Installers and Repairers</b> Annual Openings = 9 Median Wage = \$37,960	<b>Photographers</b> Annual Openings = 55 Median Wage = \$29,930	<b>Technical Writers</b> Annual Openings = 64 Median Wage = \$65,820	*
*	<b>Print Binding and Finishing</b> <b>Workers</b> Annual Openings = 8 Median Wage = \$29,260	Fine Artists, Including Painters, Sculptors, and Illustrators Annual Openings = 33 Median Wage = \$47,440	<b>Writers and Authors</b> Annual Openings = 35 Median Wage = \$62,820	*
*	*	<b>Camera Operators,</b> <b>Television, Video, and Film</b> Annual Openings = 22 Median Wage = \$22,990	<b>News Analysts, Reporters, and Journalists</b> Annual Openings = 35 Median Wage = \$39,240	*

\* There are no occupations in this Job Zone for this cluster.



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In New Mexico, we are likely to see moderate new job growth in the Business Management and Administration career cluster in the next decade. Since almost any workplace benefits from strong leadership and organizational support, business and management occupations exist in all industries. Many of us value the peace of mind that comes from knowing that we have other options if we lose our current jobs. More than most clusters, business administration includes careers that move relatively easily from one industry or location to another. Recently, the U.S. Bureau of Labor Statistics listed a dozen careers that offer this kind of flexibility.

The list included occupations from business management:

Customer service representatives

Secretaries and administrative assistants, except legal, medical, and executive

General and operations managers General office clerks Management analysts Human resources specialists Sales managers

> Work environments match the functions of specific businesses. While desk jobs with no schedules are typical, business and management workers in industries like transportation and construction may have variable schedules and need to travel to iobsites or work in the outdoors. Educational backgrounds for these jobs range from high school through bachelor's degrees. Places offering employment include but are not limited to corporate and regional management offices federal, state and local governments; temporary service agencies; banks; and public colleges and universities.



## Core Skills

- Management of Financial Resources
- Mathematics
- Writing
- Programming
- Reading Comprehension

- Negotiation
- Persuasion
- Speaking
- Operations Analysis
- System Analysis

## **Career Pathways and Occupations**

### **Operations Management Pathway**

# Occupation

Uccupation

Business & Financial Operations

Management Analysts; Budget Analysts

### **Computer & Mathematical**

Computer Programmers; Other Computer Occupations; Database Administrators; Operations Research Analysts **Education, Training & Library** Engineering Teachers, Postsecondary

Management Computer & Information Systems Managers; Natural Sciences Managers

### **Administrative Support Pathway**

Arts, Design, Entertainment, Sports & Media Public Relations Specialists

### Office & Administrative Support

Customer Service Reps; Secretaries & Administrative Assistants, Except Legal, Medical & Executive; Office Clerks, General; Stock Clerks & Order Fillers; First-Line Supervisors of Office & Administrative Support Workers; Receptionists & Information Clerks; Executive Secretaries & Executive Administrative Assistants; Shipping, Receiving & Traffic Clerks; Medical Secretaries; Postal Service Mail Carriers; Interviewers, Except Eligibility & Loan; Insurance Claims & Policy Processing Clerks; Human Resources Assistants, Except Payroll & Timekeeping; Order Clerks; Other Office & Administrative Support Workers; Mail Clerks & Mail Machine Operators, Except Postal Service; New Account Clerks; Postal Service Mail Sorters, Processors & Processing Machine Operators; Weighers, Measurers, Checkers & Samplers, Recordkeeping; File Clerks; Library Assistants, Clerical; Legal Secretaries; Couriers & Messengers; Procurement Clerks; Cargo & Freight Agents; Postal Service Clerks



Occupation

## **Career Pathways and Occupations**

### **Business Information Management Pathway**

### **Business & Financial Operations**

Accountants & Auditors; Financial Analysts; Credit Analysts; Tax Preparers; Tax Examiners & Collectors & Revenue Agents; Budget Analysts; Financial Examiners

### **Computer & Mathematical** Statisticians

#### **Education, Training & Library**

Business Teachers, Postsecondary; Mathematical Science Teachers, Postsecondary

### Management

Other Managers; Financial Managers; Chief Executives; Natural Sciences Managers

### **Office & Administrative Support**

Bookkeeping, Accounting & Auditing Clerks; Billing & Posting Clerks; Payroll & Timekeeping Clerks; Brokerage Clerks; Statistical Assistants

### Human Resources Management Pathway

### **Business & Financial Operations**

Human Resources Specialists; Training & Development Specialists; Compensation, Benefits & Job Analysis Specialists; Labor Relations Specialists

### Education, Training & Library

Business Teachers, Postsecondary

### Management

Human Resources Managers; Training & Development Managers; Compensation & Benefits Managers

Office & Administrative Support Human Resources Assistants, Except Payroll & Timekeeping

### **General Management Pathway**

### Arts, Designs, Entertainment, Sports & Media Public Relations Specialists

### **Business & Financial Operations**

Management Analysts; Market Research Analysts & Marketing Specialists; Cost Estimators; Logisticians

### **Computer & Mathematical**

**Operations Research Analysts** 

#### Education, Training & Library

Business Teachers, Postsecondary; Communications Teachers, Postsecondary; Economics Teachers, Postsecondary

### Installation, Maintenance & Repair First-Line Supervisors of Mechanics, Installers & Repairers

Life, Physical & Social Science Survey Researchers; Economists

### Management

General & Operations Managers; Other Managers; Construction Managers; Computer & Information Systems Managers; Medical & Health Services Managers; Sales Managers; Industrial Production Managers; Administrative Services Managers; Chief Executives; Social & Community Service Managers; Transportation, Storage & Distribution Managers; Purchasing Managers; Public Relations & Fundraising Managers; Advertising & Promotions Managers

#### **Office & Administrative Support**

First-Line Supervisors of Office & Administrative Support Workers

### Production

First-Line Supervisors of Production & Operating Workers

Occupation



### **DID YOU KNOW?**

**On the job, a Human Resources Specialists would:** Interpret and explain human resources policies, procedures, laws, standards, or regulations.

Hire employees and process hiring-related paperwork.

Maintain current knowledge of Equal Employment Opportunity (EEO) and affirmative action guidelines and laws, such as the Americans with Disabilities Act (ADA).

Source: P2C Career Explorer, engage.pathway2careers.com



### **Top 10 High-Value Careers in New Mexico**

For a complete list of careers within this cluster and to review occupations specific to your workforce region, visit <u>careerpathways-nm.com</u>.

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
General and Operations Managers	General Management	Plan, direct, or coordinate the operations of public or private sector organizations, overseeing multiple departments or locations. Duties and responsibilities include formulating policies, managing daily operations, and planning the use of materials and human resources, but are too diverse and general in nature to be classified in any one functional area of management or administration, such as personnel, purchasing, or administrative services. Usually manage through subordinate supervisors. Excludes First-Line Supervisors.	4	ECS	1,383	\$94,380
Bookkeeping, Accounting, and Auditing Clerks	Administrative Support	Compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. May also check the accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers.	3	CE	990	\$37,880
First-Line Supervisors of Office and Administrative Support Workers	Administrative Support	Directly supervise and coordinate the activities of clerical and administrative support workers.	3	ECS	941	\$49,000
Management Analysts	Operations Management	Conduct organizational studies and evaluations, design systems and procedures, conduct work simplification and measurement studies, and prepare operations and procedures manuals to assist management in operating more efficiently and effectively. Includes program analysts and management consultants.	4	IRC	461	\$77,960



Technology	Knowledge	Skills	Abilities
Enterprise resource planning ERP software Microsoft Dynamics; SAP software Data base user interface and query software Blackboard software; Yardi software Customer relationship management CRM software Salesforce software; Sugar CRM	Business management; customer service Arts and Humanities English language Manufactured or Agricultural Goods manufacture and distribution of products Math and Science arithmetic, algebra, geometry, calculus, or statistics	Basic Skills keeping track of how well people and/ or groups are doing in order to make improvements; listening to others, not interrupting, and asking good questions <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it <b>Social</b> changing what is done based on other people's actions; understanding people's reactions	<b>Verbal</b> communicate by speaking; communicate by writing <b>Ideas and Logic</b> notice when problems happen and use rules to solve problems
Accounting software Intuit QuickBooks; Sage 50 Accounting Cloud-based data access and sharing software Dropbox; Microsoft SharePoint Enterprise resource planning ERP software Microsoft Dynamics; SAP software	Business customer service; administrative services Math and Science arithmetic, algebra, geometry, calculus, or statistics Arts and Humanities English language Engineering and Technology computers and electronics	Basic Skills using math to solve problems; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it	Verbal listen and understand what people say; read and understand what is written Math choose the right type of math to solve a problem, add, subtract, multiply, or divide
Enterprise resource planning ERP software Microsoft Dynamics; SAP software Data base user interface and query software Blackboard software; Yardi software Accounting software Intuit QuickBooks; Sage 50 Accounting	Business management; customer service Arts and Humanities English language Engineering and Technology computers and electronics	Basic Skills keeping track of how well people and/ or groups are doing in order to make improvements; listening to others, not interrupting, and asking good questions Social changing what is done based on other people's actions; understanding people's reactions Problem Solving noticing a problem and figuring out the best way to solve it	<b>Verbal</b> listen and understand what people say; communicate by speaking <b>Ideas and Logic</b> notice when problems happen; order or arrange things
Web platform development software Google Angular; Spring Framework Data base user interface and query software Blackboard software; Transact- SQL Development environment software Apache Kafka; Apache Maven	Arts and Humanities English language Business management; customer service Math and Science arithmetic, algebra, geometry, calculus, or statistics; psychology Education and Training teaching and course design	Basic Skills listening to others, not interrupting, and asking good questions; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; measuring how well a system is working and how to improve it	<b>Verbal</b> communicate by speaking; listen and understand what people say <b>Ideas and Logic</b> notice when problems happen; make general rules or come up with answers from lots of detailed information



High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Human Resources Specialists	Human Resources Management	Recruit, screen, interview, or place individuals within an organization. May perform other activities in multiple human resources areas.	4	ECS	337	\$57,350
Training and Development Specialists	Human Resources Management	Design or conduct work-related training and development programs to improve individual skills or organizational performance. May analyze organizational training needs or evaluate training effectiveness.	4	SAC	272	\$60,130
Computer and Information Systems Managers	Business Information Management	Plan, direct, or coordinate activities in such fields as electronic data processing, information systems, systems analysis, and computer programming.	4	ECI	107	\$125,930
Information and Record Clerks, All Other	Administrative Support	Answer inquiries and provide information to the general public, customers, visitors, and other interested parties regarding activities conducted at establishment and location of departments, offices, and employees within the organization.	2	CES	96	\$44,530

Technology	Knowledge	Skills	Abilities
Enterprise resource planning ERP software Microsoft Dynamics; Workday software Data base user interface and query software Blackboard software; LinkedIn Human resources software Oracle Taleo; TempWorks recruiting and staffing softwar	Business human resources (HR); administrative services Arts and Humanities English language Safety and Government law and government Education and Training teaching and course design	Basic Skills talking to others; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it Social looking for ways to help people; understanding people's reactions	Verbal communicate by speaking; listen and understand what people say Ideas and Logic notice when problems happen; use rules to solve problems
Web platform development software Django; Drupal Computer based training software Common Curriculum; Moodle Graphics or photo imaging software Adobe Systems Adobe Creative Cloud software; Adobe System Adobe Illustrator	Education and Training teaching and course design Business customer service; human resources (HR) Arts and Humanities English language Math and Science	Basic Skills talking to others; using the best training or teaching strategies for learning new things Social teaching people how to do something; understanding people's reactions People and Technology Systems thinking about the pros and cons of different options and picking the best one; measuring how well a system is working and how to improve it	Verbal communicate by speaking; communicate by writing Ideas and Logic come up with lots of ideas; notice when problems happen Memory remember words, numbers, pictures, or steps
Web platform development software Apache Tomcat; Spring Framework Data base user interface and query software Amazon Web Services AWS software; Blackboard software Enterprise resource planning ERP software Microsoft Dynamics; SAP software	Engineering and Technology computers and electronics; product and service development Business customer service; management Arts and Humanities English language Math and Science arithmetic, algebra, geometry, calculus, or statistics	Basic Skills thinking about the pros and cons of different ways to solve a problem; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	Verbal communicate by speaking; listen and understand what people say Ideas and Logic make general rules or come up with answers from lots of detailed information notice when problems happen Math add, subtract, multiply, or divide; choose the right type of math to solve a problem
Electronic mail software Email software; Microsoft Outlook Word processing software Google Docs; Microsoft Word Data base user interface and query software Claim processing system software; FileMaker Pro	Business customer service; administrative services Arts and Humanities English language Engineering and Technology computers and electronics	Basic Skills talking to others; listening to others, not interrupting, and asking good questions Social looking for ways to help people; understanding people's reactions	Verbal communicate by speaking; listen and understand what people say Attention pay attention to something without being distracted



High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage	
Meeting, Convention, and Event Planners	Operations Management	Coordinate activities of staff, convention personnel, or clients to make arrangements for group meetings, events, or conventions.	4	ECS	61	\$46,050	
Human Resources Managers	Human Resources Management	Plan, direct, or coordinate human resources activities and staff of an organization.	4	ESC	47	\$99,550	

### **Data Sources:**

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- Detailed descriptors such as Technology, Knowledge, Skills, Abilities have been taken from mynextmove.org which is powered by O\*NET
- Additional information on occupations within this cluster can be found at engage.pathway2careers.com

Technology	Knowledge	Skills	Abilities
Project management software Microsoft Project; Oracle Primavera Enterprise Project Portfolio Management Word processing software Google Docs; Microsoft Word Data base user interface and query software FileMaker Pro; Microsoft Access	Business customer service; administrative services Arts and Humanities English language Communications multimedia Engineering and Technology computers and electronics	Basic Skills listening to others, not interrupting, and asking good questions; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it Social changing what is done based on other people's actions; looking for ways to help people	Verbal communicate by speaking; communicate by writing Ideas and Logic notice when problems happen; use rules to solve problems Attention pay attention to something without being distracted; do two or more things at the same time
Time accounting software ADP ezLaborManager; Kronos Workforce Timekeeper Presentation software Mentimeter; Microsoft PowerPoint Human resources software Human resource management software HRMS; UniFocus Watson Human Resources Manager	Business human resources (HR); management Arts and Humanities English language Safety and Government law and government Education and Training teaching and course design	Basic Skillslistening to others, not interrupting, and asking good questions talking to othersProblem Solving noticing a problem and figuring out the best way to solve itPeople and Technology Systems thinking about the pros and cons of different options and picking the best one; measuring how well a system is working and how to improve it	Verbal communicate by speaking; listen and understand what people say Ideas and Logic use rules to solve problems; make general rules or come up with answers from lots of detailed information Math add, subtract, multiply, or divide; choose the right type of math to solve a problem

### **Career Cluster Map**

The P2C Career Cluster Maps provide an overview of regional high-demand occupations associated with various job zones (i.e., levels of education and training). The purpose of these maps is to assist educators and students in developing awareness of entry and exit points within a particular career field. In using this information, educators and students can quickly gain a sense of potential high-value career opportunities and the level of education and training needed to prepare for these professions. This can promote the alignment of education practices with regional careers and assist students in making informed career decisions that take into account regional labor market demands.

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorage Degree
*	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive Annual Openings = 2828 Median Wage = \$37,200	Bookkeeping, Accounting, and Auditing Clerks Annual Openings = 990 Median Wage = \$37,880	<b>General and Operations</b> <b>Managers</b> Annual Openings = 1383 Median Wage = \$94,380	<b>Operations Research Analysts</b> Annual Openings = 33 Median Wage = \$85,220
*	<b>Customer Service</b> <b>Representatives</b> Annual Openings = 2358 Median Wage = \$30,020	First-Line Supervisors of Office and Administrative Support Workers Annual Openings = 941 Median Wage = \$49,000	<b>Management Analysts</b> Annual Openings = 461 Median Wage = \$77,960	*
*	<b>Stockers and Order Fillers</b> Annual Openings = 1958 Median Wage = \$29,280	<b>Executive Secretaries and</b> <b>Executive Administrative</b> <b>Assistants</b> Annual Openings = 148 Median Wage = \$62,800	<b>Human Resources Specialists</b> Annual Openings = 337 Median Wage = \$57,350	*
*	<b>Office Clerks, General</b> Annual Openings = 851 Median Wage = \$28,820	Human Resources Assistants, Except Payroll and Timekeeping Annual Openings = 73 Median Wage = \$39,210	<b>Training and Development</b> <b>Specialists</b> Annual Openings = 272 Median Wage = \$60,130	*
*	<b>Receptionists and Information Clerks</b> Annual Openings = 730 Median Wage = \$29,110	<b>Payroll and Timekeeping Clerks</b> Annual Openings = 52 Median Wage = \$38,410	<b>Computer and Information</b> <b>Systems Managers</b> Annual Openings = 107 Median Wage = \$125,930	*

\* There are no occupations in this Job Zone for this cluster.

**Data Sources** Aligned with O\*NET job zone classification system



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Lifelong learning is a phrase we hear often. Finishing high school and other necessary training is the first step toward getting a job, and keeping our jobs often requires that we continue to update our skills. To meet these ongoing training needs, education options have broadened to include online training. Technology like electronic textbooks, notebooks, and smart boards support classroom innovations while also requiring educators to upgrade their technology skills and teaching techniques.

Most occupations in the Education and Training cluster require at least a bachelor's degree, with many postsecondary teaching professionals holding a doctoral or professional degree. Occupations with the most new jobs over the next 10 years are likely to include elementary, preschool, and middle school teachers. College-level health specialties teachers occupy the top position for highest estimated percentage increase in jobs.

Schedules for education workers vary by work setting. Preschool through high school employees work directly with students for approximately eight hours and often devote additional time at home to grading papers and planning lessons. Before and after-school workers' schedules revolve around times when students aren't in class, and coaches may work directly with students for hours beyond the usual class schedule. Industries that tend to offer many jobs for workers in this cluster include public and private schools, colleges and universities, as well as day care centers.

## **Core Skills**

- Instructing
- Learning Strategies
- Writing
- Active Learning
- Speaking

- Reading Comprehension
- Systems Evaluation
- Service Orientation
- Management of Personnel Resources
- Monitoring

## **Career Pathways and Occupations**

### Professional Support Services Pathway

**Community & Social Service** 

Educational, Guidance, School & Vocational Counselors

Education, Training & Library Librarians; Other Postsecondary Teachers; Library Technicians Life, Physical & Social Science Clinical, Counseling, & School Psychologists

Office & Administrative Support Library Assistants, Clerical

More pathways on the next page.

## **Career Pathways and Occupations**

### **Teaching/Training Pathway**

#### Arts, Design, Entertainment, Sports & Media

Coaches & Scouts; Writers & Authors; Athletes & Sports Competitors

#### **Education, Training & Library**

Elementary School Teachers, Except Special Education; Teacher Assistants; Secondary School Teachers, Postsecondary; Secondary School Teachers, Except Special & Career/Technical Education; Middle School Teachers, Except Special & Career/Technical Education; Preschool Teachers, Except Special Education; Health Specialties Teachers, Postsecondary; Special Education Teachers, Kindergarten & Elementary School; Other Teachers & Instructors; Vocational Education Teachers, Postsecondary; Self-Enrichment Education Teachers; Career/Technical Education Teachers, Secondary School; Adult Basic & Secondary Education & Literacy Teachers & Instructors; Librarians; Kindergarten Teachers, Except Special Education; Special Education Teachers, Secondary School; Instructional Coordinators; Other Postsecondary Teachers; English Language & Literature Teachers, Postsecondary; Special Education Teachers, Middle School; Business Teachers, Postsecondary; Nursing Instructors & Teachers, Postsecondary; Education Teachers, Postsecondary; Biological Science Teachers, Postsecondary; Mathematical Science Teachers, Postsecondary; Criminal Justice & Law Enforcement Teachers, Postsecondary; Computer Science Teachers, Postsecondary; Foreign Language & Literature Teachers, Postsecondary; History Teachers, Postsecondary; Career/Technical Education Teachers, Middle School; Recreation & Fitness Studies Teachers, Postsecondary; Philosophy & Religion Teachers, Postsecondary; Chemistry Teachers, Postsecondary; Engineering Teachers, Postsecondary; Communications Teachers, Postsecondary; Sociology Teachers, Postsecondary; Political Science Teachers, Postsecondary; Special Education Teachers, Preschool; Curators; Law Teachers, Postsecondary; Physics Teachers, Postsecondary; Economics Teachers, Postsecondary; Social Work Teachers, Postsecondary

Healthcare Practitioners & Technicians Dietitians & Nutritionists

Installation, Maintenance & Repair Home Appliance Repairers

Personal Care & Service Recreation Workers; Fitness Trainers & Aerobics Instructors

### Administration & Administrative Support Pathway

Arts, Design, Entertainment, Sports & Media Coaches & Scouts

### Education, Training & Library

Occupation

Instructional Coordinators; Recreation & Fitness Studies Teachers, Postsecondary

#### Management

Education Administrators, Elementary & Secondary School; Education Administrators, Postsecondary; Education Administrators, Preschool & Childcare Center/Program; Other Education Administrators

Personal Care & Service

Fitness Trainers & Aerobics Instructors



### **DID YOU KNOW?**

**On the job, a Secondary School Teacher would:** Prepare materials and classrooms for class activities.

Instruct through lectures, discussions, and demonstrations in one or more subjects, such as English, mathematics, or social studies.

Establish clear objectives for all lessons, units, and projects, and communicate those objectives to students.

Source: P2C Career Explorer, engage.pathway2careers.com





**Top 10 High-Value Careers in New Mexico** For a complete list of careers within this cluster and to review occupations specific to your workforce region, visit <u>careerpathways-nm.com</u>.

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Elementary School Teachers, Except Special Education	Teaching/Training	Teach academic and social skills to students at the elementary school level.	4	SAC	600	\$60,180
Secondary School Teachers, Except Special and Career/Technical Education	Teaching/Training	Teach one or more subjects to students at the secondary school level.	4	SAE	451	\$60,150
Middle School Teachers, Except Special and Career/Technical Education	Teaching/Training	Teach one or more subjects to students at the middle, intermediate, or junior high school level.	4	SA	248	\$60,130
Health Specialties Teachers, Postsecondary	Teaching/Training	Teach courses in health specialties, in fields such as dentistry, laboratory technology, medicine, pharmacy, public health, therapy, and veterinary medicine	5	SI	213	\$101,350



Technology	Knowledge	Skills	Abilities
<b>Electronic mail software</b> Email software; Microsoft Outlook <b>Computer based training software</b> Padlet; Schoology <b>Multi-media educational software</b> Nearpod; Seesaw	Education and Training teaching and course design Arts and Humanities English language; history and archeology Math and Science arithmetic, algebra, geometry, calculus, or statistics; psychology Engineering and Technology computers and electronics	Basic Skills talking to others; using the best training or teaching strategies for learning new things Social teaching people how to do something; changing what is done based on other people's actions People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	Verbal communicate by speaking; communicate by writing Ideas and Logic notice when problems happen; use rules to solve problems Attention do two or more things at the same time; pay attention to something without being distracted Memory remember words, numbers, pictures, or steps
Cloud-based data access and sharing software Google Drive; Microsoft SharePoint Computer based training software Moodle; Schoology Video creation and editing software Flipgrid; Screencastify	Arts and Humanities English language Education and Training teaching and course design Math and Science psychology; arithmetic, algebra, geometry, calculus, or statistics Engineering and Technology computers and electronics	Basic Skills talking to others; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it Social teaching people how to do something; understanding people's reactions	Verbal communicate by speaking; listen and understand what people say Ideas and Logic use rules to solve problems; notice when problems happen Memory remember words, numbers, pictures, or steps
<b>Electronic mail software</b> Email software; Microsoft Outlook <b>Computer based training software</b> Moodle; Schoology <b>Video creation and editing software</b> Flipgrid; Screencastify	Arts and Humanities English language; history and archeology Education and Training teaching and course design Business customer service; management Math and Science psychology	Basic Skills talking to others; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it Social teaching people how to do something; understanding people's reactions	Verbal communicate by speaking; listen and understand what people say Ideas and Logic notice when problems happen; use rules to solve problems
Word processing software Google Docs; Microsoft Word Computer based training software Adobe Systems Adobe Presenter; Learning management system LMS Medical software InteractElsevier Netter's 3D Interactive Anatomy; Medical procedure coding software	Education and Training teaching and course design Arts and Humanities English language Math and Science biology; psychology Health medicine and dentistry	Basic Skills reading work related information; talking to others Problem Solving noticing a problem and figuring out the best way to solve it Social teaching people how to do something; understanding people's reactions	Verbal communicate by speaking; read and understand what is written Ideas and Logic use rules to solve problems; make general rules or come up with answers from lots of detailed information

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Educational, Guidance, and Career Counselors and Advisors	Professional Support Services	Advise and assist students and provide educational and vocational guidance services.	5	S	168	\$60,510
Self-Enrichment Teachers	Teaching/Training	Teach or instruct individuals or groups for the primary purpose of self-enrichment or recreation, rather than for an occupational objective, educational attainment, competition, or fitness.	3	SAE	167	\$38,400
Coaches and Scouts	Teaching/Training	Instruct or coach groups or individuals in the fundamentals of sports for the primary purpose of competition. Demonstrate techniques and methods of participation. May evaluate athletes' strengths and weaknesses as possible recruits or to improve the athletes' technique to prepare them for competition. Those required to hold teaching certifications should be reported in the appropriate teaching category.	4	SRE	131	\$38,910
Education Administrators, Kindergarten through Secondary	Administration and Administrative Support	Plan, direct, or coordinate the academic, administrative, or auxiliary activities of kindergarten, elementary, or secondary schools.	5	ESC	121	\$79,550

			Education & Training
Technology	Knowledge	Skills	Abilities
Data base user interface and query software Blackboard software; Microsoft Access Analytical or scientific software ACT WorkKeys; Counseling software Computer based training software Moodle; Schoology	Health therapy and counseling Math and Science psychology; sociology and anthropology Arts and Humanities English language Education and Training teaching and course design	Basic Skills listening to others, not interrupting, and asking good questions; talking to others Social understanding people's reactions; looking for ways to help people <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it	Verbal communicate by speaking; listen and understand what people say Ideas and Logic notice when problems happen; make general rules or come up with answers from lots of detailed information Attention pay attention to something without being distracted
Graphics or photo imaging software Adobe Systems Adobe Photoshop; Corel Paint Shop Pro Video creation and editing software Video editing software; YouTube Computer based training software Educational software; Schoology	Education and Training teaching and course design Business customer service Arts and Humanities English language	Basic Skills talking to others; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it	Verbal communicate by speaking; listen and understand what people say Ideas and Logic order or arrange things; use rules to solve problems
Word processing software Google Docs; Microsoft Word Video creation and editing software Flipgrid; YouTube Desktop communications software Edmodo; ParentSquare	Education and Training teaching and course design Arts and Humanities English language Business management; customer service Math and Science	Basic Skills talking to others; keeping track of how well people and/or groups are doing in order to make improvements Social teaching people how to do something; understanding people's reactions Broblem Solving	Verbal communicate by speaking; listen and understand what people say Ideas and Logic create new and original ideas; orde or arrange things Attention

Edmodo; ParentSquare

Math and Science psychology

**Problem Solving** noticing a problem and figuring out the

best way to solve it

### Verbal

being distracted

communicate by speaking; listen and understand what people say Ideas and Logic

pay attention to something without

use rules to solve problems; make general rules or come up with answers from lots of detailed

### Attention

do two or more things at the same time; pay attention to something without being distracted

### Math

choose the right type of math to solve a problem

### Analytical or scientific software

Desmos; IBM SPSS Statistics Enterprise resource planning ERP software

Microsoft Dynamics GP; Wilcomp Software RenWeb

Data base user interface and query software

Blackboard software; Microsoft Access

### **Arts and Humanities**

English language

**Business** 

management; human resources (HR)

**Education and Training** teaching and course design **Safety and Government** 

law and government

### **Basic Skills**

listening to others, not interrupting, and asking good questions; talking to others

### **Problem Solving**

noticing a problem and figuring out the information best way to solve it

### Social

understanding people's reactions; changing what is done based on other people's actions



High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage	
Kindergarten Teachers, Except Special Education	Teaching/Training	Teach academic and social skills to kindergarten students.	4	SA	113	\$49,770	
Interpreters and Translators	Professional Support Services	Interpret oral or sign language, or translate written text from one language into another.	4	AS	110	\$48,930	

Technology	Knowledge	Skills	Abilities
<b>Spreadsheet software</b> Microsoft Excel <b>Computer based training software</b> Children's educational software; Padlet <b>Electronic mail software</b> Microsoft Outlook	Education and Training teaching and course design Arts and Humanities English language Math and Science psychology; arithmetic, algebra, geometry, calculus, or statistics Business customer service	Basic Skills keeping track of how well people and/ or groups are doing in order to make improvements; listening to others, not interrupting, and asking good questions Social teaching people how to do something; understanding people's reactions Problem Solving noticing a problem and figuring out the best way to solve it	Verbal communicate by speaking; read an understand what is written Ideas and Logic notice when problems happen; come up with lots of ideas Attention pay attention to something without being distracted; do two or more things at the same time
Web platform development software Extensible hypertext markup language XHTML; Hypertext markup language HTML Presentation software Microsoft PowerPoint Foreign language software AceTools.biz Ace Translator; Stormdance CatsCradle	Arts and Humanities English language; foreign language Business customer service; administrative services Education and Training teaching and course design Safety and Government public safety and security	Basic Skills talking to others; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it	Verbal communicate by speaking; listen and understand what people say Ideas and Logic order or arrange things; notice when problems happen Attention pay attention to something withour being distracted; do two or more things at the same time

### **Career Cluster Map**

The P2C Career Cluster Maps provide an overview of regional high-demand occupations associated with various job zones (i.e., levels of education and training). The purpose of these maps is to assist educators and students in developing awareness of entry and exit points within a particular career field. In using this information, educators and students can quickly gain a sense of potential high-value career opportunities and the level of education and training needed to prepare for these professions. This can promote the alignment of education practices with regional careers and assist students in making informed career decisions that take into account regional labor market demands.

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
*	*	<b>Preschool Teachers, Except</b> <b>Special Education</b> Annual Openings = 317 Median Wage = \$28,550	Elementary School Teachers, Except Special Education Annual Openings = 600 Median Wage = \$60,180	<b>Health Specialties Teachers,</b> <b>Postsecondary</b> Annual Openings = 213 Median Wage = \$101,350
*	*	<b>Self-Enrichment Teachers</b> Annual Openings = 167 Median Wage = \$38,400	Secondary School Teachers, Except Special and Career/ Technical Education Annual Openings = 451 Median Wage = \$60,150	Educational, Guidance, and Career Counselors and Advisors Annual Openings = 168 Median Wage = \$60,510
*	*	<b>Library Technicians</b> Annual Openings = 78 Median Wage = \$29,990	<b>Substitute Teachers, Short- Term</b> Annual Openings = 415 Median Wage = \$28,850	Education Administrators, Kindergarten through Secondary Annual Openings = 121 Median Wage = \$79,550
*	*	<b>Career/Technical Education</b> <b>Teachers, Postsecondary</b> Annual Openings = 62 <i>Median Wage = \$60,040</i>	Middle School Teachers, Except Special and Career/ Technical Education Annual Openings = 248 Median Wage = \$60,130	<b>Teaching Assistants,</b> <b>Postsecondary</b> Annual Openings = 71 Median Wage = \$38,320
*	*	*	<b>Coaches and Scouts</b> Annual Openings = 131 Median Wage = \$38,910	<b>Librarians and Media</b> <b>Collections Specialists</b> Annual Openings = 62 Median Wage = \$48,650

\* There are no occupations in this Job Zone for this cluster.

**Data Sources** Aligned with O\*NET job zone classification system



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## Finance

Money is an essential element in each of our lives. We entrust our financial well-being to people who safeguard bank accounts, provide loans, insure cars and homes, and help us make wise investments. Their math skills must be strong, and they must be precise, paying close attention to detail and keeping accurate records. Workers also need good communication skills in order to respond to questions and clearly explain information. They must be service oriented and sometimes work with people who are under stress about their finances.

Finance jobs exist in settings that range from banks to tax return centers to private offices. Most large organizations like hospitals have finance employees. While financial specialists usually have an 8 to 5 schedule, some workers' schedules must accommodate their clients' after work hours. Tax preparers have intense work times from the beginning of January until April 15.

> In New Mexico, the majority of finance occupations require a high school education or a bachelor's degree. The finance industry shows one of the highest rates of new jobs in the state, and occupations in the securities, commodities, and other financial investments sector should have some of the state's highest average weekly wages. Likely places to find jobs include banks, corporate management offices, insurance agencies, insurance underwriting companies, and offices of Certified Public Accountants.

**FINANCE** 

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## **Core Skills**

- Mathematics
- Reading Comprehension
- Management of Financial Resources
- Persuasion
- Speaking

- Negotiation
- Writing
- Active Listening
- Critical Thinking
- Service Orientation

## **Career Pathways and Occupations**

Occupation

**Business Financial Management Pathway** 

Business & Financial Operations Financial Analysts

### **Financial & Investment Planning Pathway**

**Business & Financial Operations** Loan Officers; Financial Analysts; Personal Financial Advisors; Other Financial Specialists; Credit Analysts; Tax Preparers; Budget Analysts

Education, Training & Library Business Teachers, Postsecondary **Office & Administrative Support** Brokerage Clerks

Sales & Sales Related Sales Reps, Wholesale & Manufacturing, Except Technical & Scientific Products; Insurance Sales Agents; Telemarketers

### **Insurance Services Pathway**

### **Business & Financial Operations**

Claims Adjusters, Examiners & Investigators; Insurance Underwriters

**Computer & Mathematical** Actuaries

Education, Training & Library Business Teachers, Postsecondary Office & Administrative Support Insurance Claims & Policy Processing Clerks

Sales & Sales Related Sales Reps, Wholesale & Manufacturing, Except Technical & Scientific Products; Insurance Sales Agents; Telemarketers

### **Banking & Related Services Pathway**

Business & Financial Operations Loan Officers; Credit Analysts

#### Legal

Title Examiners, Abstractors & Searchers

**Office & Administrative Support** 

Tellers; Bill & Account Collectors; Loan Interviewers & Clerks; New Account Clerks; Credit Authorizers, Checkers, & Clerks


**Top 10 High-Value Careers in New Mexico** For a complete list of careers within this cluster and to review occupations specific to your workforce region, visit <u>careerpathways-nm.com</u>.

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Accountants and Auditors	Accounting	Examine, analyze, and interpret accounting records to prepare financial statements, give advice, or audit and evaluate statements prepared by others. Install or advise on systems of recording costs or other financial and budgetary data.	4	CEI	681	\$62,480
Insurance Sales Agents	Insurance	Sell life, property, casualty, health, automotive, or other types of insurance. May refer clients to independent brokers, work as an independent broker, or be employed by an insurance company.	4	ECS	203	\$47,770
Financial Managers	Business Finance	Plan, direct, or coordinate accounting, investing, banking, insurance, securities, and other financial activities of a branch, office, or department of an establishment.	4	ECS	187	\$99,510
Loan Officers	Banking Services	Evaluate, authorize, or recommend approval of commercial, real estate, or credit loans. Advise borrowers on financial status and payment methods. Includes mortgage loan officers and agents, collection analysts, loan servicing officers, loan underwriters, and payday loan officers.	4	CES	116	\$61,170



#### Technology

#### Knowledge

#### Skills

### Abilities

#### Accounting software

Intuit QuickBooks; Sage 50 Accounting

### Word processing software

Google Docs; Microsoft Word

Financial analysis software Oracle E-Business Suite Financials; Tropics workers' compensation software

## Enterprise resource planning ERP software

AMS Services AMS Sagitta; Microsoft Dynamics

#### Video creation and editing software

Adobe Systems Adobe After Effects: YouTube

Customer relationship

#### management CRM software Applied Systems Vision; Tangle S

Creations Your Insurance Office

## Enterprise resource planning ERP software

Microsoft Dynamics; SAP software

Presentation software Microsoft PowerPoint

Data base user interface and query software

Microsoft SQL Server; Yardi software

#### Data base user interface and query software

FileMaker Pro; Microsoft Access Video conferencing software Zoom

### **Financial analysis software** Delphi Discovery; White Clarke

North America Credit Adjudication and Lending Management

Business accounting and economics; customer service Arts and Humanities English language Math and Science arithmetic, algebra, geometry, calculus, or statistics Safety and Government law and government

customer service; sales and

arithmetic, algebra, geometry,

**Arts and Humanities** 

English language

Math and Science

calculus, or statistics

law and government

customer service;

Math and Science

calculus, or statistics

law and government

**Arts and Humanities** 

English language

and economics

English language

Math and Science

calculus, or statistics

law and government

**Safety and Government** 

**Arts and Humanities** 

**Business** 

Safety and Government

arithmetic, algebra, geometry,

customer service; accounting

arithmetic, algebra, geometry,

management

Safety and Government

**Business** 

marketing

**Business** 

## Basic Skills

listening to others, not interrupting, and asking good questions; reading work related information

#### **Problem Solving**

noticing a problem and figuring out the best way to solve it

#### People and Technology Systems

thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it

#### Math

add, subtract, multiply, or divide; choose the right type of math to solve a problem **Verbal** 

#### verbal

communicate by speaking; read and understand what is written

#### Ideas and Logic

use rules to solve problems; notice when problems happen

#### Basic Skills

reading work related information; listening to others, not interrupting, and asking good questions Social

talking people into changing their minds or their behavior; looking for ways to help people

#### **Basic Skills**

listening to others, not interrupting, and asking good questions; reading work related information

#### Problem Solving

noticing a problem and figuring out the best way to solve it

#### Social

changing what is done based on other people's actions; looking for ways to help people

#### Basic Skills

listening to others, not interrupting, and asking good questions; talking to others

#### Problem Solving

noticing a problem and figuring out the best way to solve it

#### Verbal

communicate by speaking; listen and understand what people say

#### Ideas and Logic

notice when problems happen; use rules to solve problems

#### Math

choose the right type of math to solve a problem; add, subtract, multiply, or divide

#### Verbal

communicate by speaking; listen and understand what people say

#### Ideas and Logic

use rules to solve problems; make general rules or come up with answers from lots of detailed information

#### Math

add, subtract, multiply, or divide; choose the right type of math to solve a problem

#### **Visual Understanding**

see hidden patterns

#### Verbal

communicate by speaking; listen and understand what people say

#### Math

add, subtract, multiply, or divide; choose the right type of math to solve a problem

#### Ideas and Logic

make general rules or come up with answers from lots of detailed information; notice when problems happen

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Securities, Commodities, and Financial Services Sales Agents	Securities and Investments	Buy and sell securities or commodities in investment and trading firms, or provide financial services to businesses and individuals. May advise customers about stocks, bonds, mutual funds, commodities, and market conditions.	4	ECS	115	\$48,791
Loan Interviewers and Clerks	Banking Services	Interview loan applicants to elicit information; investigate applicants' backgrounds and verify references; prepare loan request papers; and forward findings, reports, and documents to appraisal department. Review loan papers to ensure completeness, and complete transactions between loan establishment, borrowers, and sellers upon approval of loan.	3	CE	72	\$45,37
Budget Analysts	Business Finance	Examine budget estimates for completeness, accuracy, and conformance with procedures and regulations. Analyze budgeting and accounting reports.	4	CEI	48	\$75,82
Personal Financial Advisors	Securities and Investments	Advise clients on financial plans using knowledge of tax and investment strategies, securities, insurance, pension plans, and real estate. Duties include assessing clients' assets, liabilities, cash flow, insurance coverage, tax status, and financial objectives. May also buy and sell financial assets for clients.	4	ECS	44	\$82,44

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			FINANCE
Technology	Knowledge	Skills	Abilities
Enterprise resource planning ERP software Oracle PeopleSoft; SAP software Presentation software Microsoft PowerPoint Financial analysis software Oracle E-Business Suite Financials; Web-based trading systems	Business customer service; accounting and economics Arts and Humanities English language Math and Science arithmetic, algebra, geometry, calculus, or statistics Engineering and Technology computers and electronics	Basic Skills listening to others, not interrupting, and asking good questions; thinking about the pros and cons of different ways to solve a problem Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	Verbal listen and understand what people say; communicate by speaking Ideas and Logic use rules to solve problems; notice when problems happen Math choose the right type of math to solve a problem; add, subtract, multiply, or divide
Spreadsheet software Microsoft Excel; Rockport Integrated Excel Underwriting Presentation software Microsoft PowerPoint Financial analysis software Fannie Mae Desktop Underwriter; Software AG Underwriting Solution	Business customer service; administrative services Arts and Humanities English language Engineering and Technology computers and electronics Safety and Government law and government	Basic Skills listening to others, not interrupting, and asking good questions; talking to others Problem Solving noticing a problem and figuring out the best way to solve it Social understanding people's reactions; changing what is done based on other people's actions	Verbal listen and understand what people say; read and understand what is written Ideas and Logic notice when problems happen; order or arrange things Math choose the right type of math to solve a problem; add, subtract, multiply, or divide Attention pay attention to something without being distracted
Data base user interface and query software Microsoft Access; Structured query language SQL Presentation software Microsoft PowerPoint; SAP Crystal Xcelsius Enterprise resource planning ERP software Microsoft Dynamics GP; Sage Active Planner	Business accounting and economics; management Math and Science arithmetic, algebra, geometry, calculus, or statistics Arts and Humanities English language Safety and Government law and government	Basic Skills listening to others, not interrupting, and asking good questions; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	Math add, subtract, multiply, or divide; choose the right type of math to solve a problem Verbal listen and understand what people say; read and understand what is written Ideas and Logic make general rules or come up with answers from lots of detailed information; use rules to solve problems
Data base user interface and query software Microsoft SQL Server; Structured query language SQL Presentation software Financial planning presentation software; Microsoft PowerPoint	Business customer service; accounting and economics Arts and Humanities English language Math and Science arithmetic, algebra, geometry, calculus, or statistics;	Basic Skills listening to others, not interrupting, and asking good questions; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of	Verbal communicate by speaking; communicate by writing Math add, subtract, multiply, or divide; choose the right type of math to solve a problem Ideas and Logic make general rules or some up with

Financial analysis software Oracle E-Business Suite Financials; WealthTec Foundations

psychology

Safety and Government law and government

thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it

make general rules or come up with answers from lots of detailed information; use rules to solve problems



### **Career Cluster Map**

The P2C Career Cluster Maps provide an overview of regional high-demand occupations associated with various job zones (i.e., levels of education and training). The purpose of these maps is to assist educators and students in developing awareness of entry and exit points within a particular career field. In using this information, educators and students can quickly gain a sense of potential high-value career opportunities and the level of education and training needed to prepare for these professions. This can promote the alignment of education practices with regional careers and assist students in making informed career decisions that take into account regional labor market demands.

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certicate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
*	<b>Tellers</b> Annual Openings = 215 Median Wage = \$30,130	Loan Interviewers and Clerks Annual Openings = 72 Median Wage = \$45,370	<b>Accountants and Auditors</b> Annual Openings = 681 Median Wage = \$62,480	*
*	<b>Insurance Claims and Policy</b> <b>Processing Clerks</b> Annual Openings = 88 Median Wage = \$37,230	<b>Tax Preparers</b> Annual Openings = 39 Median Wage = \$34,720	<b>Insurance Sales Agents</b> Annual Openings = 203 Median Wage = \$47,770	*
*	<b>Bill and Account Collectors</b> Annual Openings = 57 Median Wage = \$38,050	<b>Brokerage Clerks</b> Annual Openings = 6 Median Wage = \$47,040	<b>Financial Managers</b> Annual Openings = 187 Median Wage = \$99,510	*
*	<b>Credit Authorizers,</b> <b>Checkers, and Clerks</b> Annual Openings = *** Median Wage = \$30,400	<b>Insurance Appraisers, Auto Damage</b> Annual Openings = *** Median Wage = \$76,600	<b>Loan Officers</b> Annual Openings = 116 Median Wage = \$61,170	*
*	<b>Financial Clerks, All Other</b> Annual Openings = *** Median Wage = \$46,680	*	Securities, Commodities, and Financial Services Sales Agents Annual Openings = 115 Median Wage = \$48,790	*

\* There are no occupations in this Job Zone for this cluster.

**Data Sources** Aligned with 0\*NET job zone classification system

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# **Government & Public Administration**

Government ensures that citizens have vital services that they might not otherwise be able to access. Government employees provide regulatory oversight and support for transportation, public safety, healthcare, education, utilities, and courts. In New Mexico, most government employees work for state or local governments. However, there are many opportunities for federal government jobs through a major presence of the National Research Laboratories and Department of Defense. Occupations in government mirror careers found in almost every industry. They range from a number of business, management, and administrative occupations to jobs related to construction and transportation.

> Public work sector jobs typically require the same educational requirements as private sector occupations. Government employees' work schedules and environments depend on workers' specific jobs and at time on the size and level of government. This cluster includes desk jobs with regular eight hour workdays as well as outdoor work with varying schedules. While hiring practices for most government workers are similar to those in other sectors, some public sector employees are elected or appointed to their jobs.

# 

# **Core Skills**

- Writing
- Negotiation
- Reading Comprehension
- Speaking
- Management of Financial Resources

- Mathematics
- Management of Personnel Resources
- Systems Analysis
- Social Perceptiveness
- Active Listening

## **Career Pathways and Occupations**

#### **Revenue & Taxation Pathway**

**Business & Financial Operations** Accountants & Auditors; Appraisers & Assessors of Real Estate; Financial Examiners

#### Тах

Tax Preparers; Tax Examiners & Collectors and Revenue Agents

#### Governance Pathway

Occupation

Uccupatio

Occupation

Architecture & Engineering Surveying & Mapping Technicians

Arts, Design, Entertainment, Sports & Media Public Relations Specialists

**Education, Training & Library** Communications Teachers, Postsecondary; Political Science Teachers, Postsecondary

#### Management

General & Operations Managers; Other Managers; Administrative Services Managers; Chief Executives; Social & Community Service Managers; Transportation, Storage & Distribution Managers; Postmasters & Mail Superintendents

#### Planning Pathway

Education, Training & Library Political Science Teachers, Postsecondary

Life, Physical & Social Science Urban & Regional Planners; Economists Management Architectural & Engineering Managers

Office & Administrative Support Interviewers, Except Eligibility & Loan; Statistical Assistants

#### **Public Management & Administration Pathway**

#### Management

Other Managers; Social & Community Service Managers; Postmasters & Mail Superintendents

#### **Office & Administrative Support**

Postal Service Mail Carriers; Court Municipal & License Clerks; Eligibility Interviewers, Government Programs; Postal Service Mail Sorters, Processors & Processing Machine Operators; Postal Service Clerks



# **Career Pathways and Occupations**

#### **Regulation Pathway**

Occupation

**Business & Financial Operations** Compliance Officers; Financial Examiners

Construction & Extraction Construction & Building Inspectors Protective Service Detectives & Criminal Investigators

Transportation & Material Moving Transportation Inspectors

#### **National Security Pathway**

#### Military Enlisted Tactical Operations & Air/Weapons Specialists & Crew Members

Air Crew Members, Aircraft Launch & Recovery Specialists, Armored Assault Vehicle Crew Members, Artillery & Missile Crew Members, Command and Control Center Specialists, Infantry, Radar & Sonar Technicians, Special Forces

**First-Line Enlisted Military Supervisor/Managers** First-Line Supervisors of Air Crew Members, First-Line Supervisors of Weapons Specialists/Crew Members Military Officer Special & Tactical Operations Leaders/ Managers

Air Crew Officers, Aircraft Launch & Recovery Officers, Armored Assault Vehicle Officers, Artillery & Missile Officers, Command and Control Center Officers, Infantry Officers, Special Forces Officers



## **DID YOU KNOW?**

**On the job, Urban and Regional Planners would:** Design, promote, or administer government plans or policies affecting land use, zoning, public utilities, community facilities, housing, or transportation.

Advise planning officials on project feasibility, costeffectiveness, regulatory conformance, or possible alternatives.

Create, prepare, or requisition graphic or narrative reports on land use data, including land area maps overlaid with geographic variables, such as population density.

Source: P2C Career Explorer, engage.pathway2careers.com





**Top 10 High-Value Careers in New Mexico** For a complete list of careers within this cluster and to review occupations specific to your workforce region, visit <u>careerpathways-nm.com</u>.

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Compliance Officers	Governance	Examine, evaluate, and investigate eligibility for or conformity with laws and regulations governing contract compliance of licenses and permits, and perform other compliance and enforcement inspection and analysis activities not classified elsewhere.	3	ECS	136	\$60,040
Court, Municipal, and License Clerks	Public Management and Administration	Perform clerical duties for courts of law, municipalities, or governmental licensing agencies and bureaus. May prepare docket of cases to be called; secure information for judges and court; prepare draft agendas or bylaws for town or city council; answer official correspondence; keep fiscal records and accounts; issue licenses or permits; and record data, administer tests, or collect fees.	2	CES	110	\$37,500
Occupational Health and Safety Specialists	Regulation	Review, evaluate, and analyze work environments and design programs and procedures to control, eliminate, and prevent disease or injury caused by chemical, physical, and biological agents or ergonomic factors. May conduct inspections and enforce adherence to laws and regulations governing the health and safety of individuals. May be employed in the public or private sector.	4	IC	99	\$79,010
Eligibility Interviewers, Government Programs	Public Management and Administration	Determine eligibility of persons applying to receive assistance from government programs and agency resources, such as welfare, unemployment benefits, social security, and public housing.	3	SCE	82	\$44,030



Technology	Knowledge	Skills	Abilities
Data base user interface and query software Database software; Microsoft Access Presentation software Microsoft PowerPoint Spreadsheet software Microsoft Excel	Safety and Government law and government; public safety and security Arts and Humanities English language Business customer service; management Engineering and Technology computers and electronics	Basic Skills listening to others, not interrupting, and asking good questions; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it Social understanding people's reactions; looking for ways to help people	Verbal communicate by speaking; listen and understand what people say Ideas and Logic make general rules or come up with answers from lots of detailed information; notice when problems happen Hearing and Speech speak clearly; recognize spoken words
Electronic mail software Email software; Microsoft Outlook Video conferencing software Zoom Data base user interface and query software Abilis CORIS Offender Management System; Microsoft Access	Business customer service; administrative services Safety and Government law and government Arts and Humanities English language Engineering and Technology computers and electronics	<b>Basic Skills</b> listening to others, not interrupting, and asking good questions; talking to others <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it	<b>Verbal</b> listen and understand what people say; communicate by speaking <b>Ideas and Logic</b> notice when problems happen; order or arrange things
Data base user interface and query software EcoLogic ADAM Indoor Air Quality and Analytical Data Management; Microsoft Access Presentation software	Arts and Humanities English language Education and Training teaching and course design Math and Science	<b>Basic Skills</b> talking to others; listening to others, not interrupting, and asking good questions <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it	Verbal communicate by speaking; communicate by writing Ideas and Logic make general rules or come up with answers from lots of detailed information; notice when problems happen

Presentation software Microsoft PowerPoint

**Compliance software** ESS Compliance Suite; Primatech **AUDITWorks** 

Math and Science chemistry; arithmetic, algebra, geometry, calculus, or statistics

Safety and Government public safety and security

#### People and Technology Systems

measuring how well a system is working and how to improve it; thinking about the pros and cons of different options and picking the best one

#### Visual Understanding

see hidden patterns; quickly compare groups of letters, numbers, pictures, or other things

#### Math

choose the right type of math to solve a problem

#### Verbal

communicate by speaking; listen and understand what people say **Ideas and Logic** 

make general rules or come up with answers from lots of detailed information; use rules to solve problems

Electronic mail software

Email software; Microsoft Outlook

Video conferencing software

Google Meet; Zoom

#### Medical software

GE Healthcare Centricity EMR; Medicaid management information system MMIS

#### **Business**

customer service; management **Arts and Humanities** English language **Education and Training** teaching and course design Engineering and Technology computers and electronics

**Basic Skills** 

talking to others; listening to others, not interrupting, and asking good questions **Problem Solving** 

noticing a problem and figuring out the best way to solve it

#### Social

understanding people's reactions; looking for ways to help people



High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Urban and Regional Planners	Planning	Develop comprehensive plans and programs for use of land and physical facilities of jurisdictions, such as towns, cities, counties, and metropolitan areas.	5	IRA	49	\$60,500
Agricultural Inspectors	Regulation	Inspect agricultural commodities, processing equipment, and facilities, and fish and logging operations, to ensure compliance with regulations and laws governing health, quality, and safety.	2	RCI	15	\$38,380
Transportation Inspectors	Governance	Inspect equipment or goods in connection with the safe transport of cargo or people. Includes rail transportation inspectors, such as freight inspectors, rail inspectors, and other inspectors of transportation vehicles not elsewhere classified.	4	RCE	13	\$61,970
Emergency Management Directors	Public Management and Administration	Plan and direct disaster response or crisis management activities, provide disaster preparedness training, and prepare emergency plans and procedures for natural (e.g., hurricanes, floods, earthquakes), wartime, or technological (e.g., nuclear power plant emergencies or hazardous materials spills) disasters or hostage situations.	4	SE	11	\$87,670

	GO\	/ERNMENT & PUBLIC A	ADMINISTRATION
Technology	Knowledge	Skills	Abilities
Computer aided design CAD software Bentley MicroStation; Trimble SketchUp Pro Presentation software Microsoft PowerPoint Geographic information system ESRI ArcGIS software; Geographic information system GIS software	Safety and Government law and government Arts and Humanities English language Math and Science geography; sociology and anthropology Transportation movement of people or goods by air, rail, sea, or road	Basic Skills listening to others, not interrupting, and asking good questions; talking to others People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it Problem Solving noticing a problem and figuring out the best way to solve it	Verbal communicate by speaking; listen and understand what people say Ideas and Logic notice when problems happen; make general rules or come up with answers from lots of detailed information Math add, subtract, multiply, or divide; choose the right type of math to solve a problem
<b>Spreadsheet software</b> Microsoft Excel <b>Presentation software</b> Microsoft PowerPoint <b>Electronic mail software</b> Microsoft Outlook	Business customer service; management Safety and Government law and government; public safety and security Math and Science arithmetic, algebra, geometry, calculus, or statistics Arts and Humanities English language	Basic Skillskeeping track of how well people and/ or groups are doing in order to make improvements; listening to others, not interrupting, and asking good questionsPeople and Technology Systemsthinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect itProblem Solving noticing a problem and figuring out the best way to solve it	Verbal listen and understand what people say; communicate by speaking Ideas and Logic notice when problems happen; make general rules or come up with answers from lots of detailed information Visual Understanding see hidden patterns; quickly compare groups of letters, numbers, pictures, or other things

#### Electronic mail software

Email software; Microsoft Outlook Spreadsheet software Microsoft Excel Document management software Adobe Systems Adobe Acrobat

#### Transportation movement of people or goods by air, rail, sea, or road **Arts and Humanities** English language **Business** customer service; management **Math and Science** arithmetic, algebra, geometry,

**Basic Skills** 

reading work related information; talking to others

#### **Problem Solving**

noticing a problem and figuring out the best way to solve it

#### Verbal

communicate by speaking; listen and understand what people say Ideas and Logic

::(

notice when problems happen; make general rules or come up with answers from lots of detailed information

#### Verbal

communicate by speaking; listen and understand what people say **Ideas and Logic** 

use rules to solve problems; make general rules or come up with answers from lots of detailed information

#### Attention

do two or more things at the same time; pay attention to something without being distracted

#### **Visual Understanding**

quickly compare groups of letters, numbers, pictures, or other things

### Geographic information system

ESRI ArcGIS software; Geographic information system GIS software

#### **Presentation software**

Microsoft PowerPoint Data base user interface and query

#### software

Relational database software; SoftRisk Technologies SoftRisk SQL Safety and Government

calculus, or statistics

public safety and security; law and government

#### **Business**

management; customer service

#### Communications

multimedia; telecommunications Arts and Humanities

English language

### **Basic Skills**

talking to others; keeping track of how well people and/or groups are doing in order to make improvements

#### **Problem Solving**

noticing a problem and figuring out the best way to solve it

#### Social

looking for ways to help people; changing what is done based on other people's actions



High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Occupational Health and Safety Technicians	Regulation	Collect data on work environments for analysis by occupational health and safety specialists. Implement and conduct evaluation of programs designed to limit chemical, physical, biological, and ergonomic risks to workers.	3	CR	8	\$47,410
Financial Examiners	Governance	Enforce or ensure compliance with laws and regulations governing financial and securities institutions and financial and real estate transactions. May examine, verify, or authenticate records.	4	EC	7	\$61,940

#### Data Sources:

- The list of High-Value Occupations have been derived by analysis of the data from the U.S. Department of Labor, Employment and Training Administration (USDOL/ETA) and New Mexico Workforce Connection.
- Detailed descriptors such as Technology, Knowledge, Skills, Abilities have been taken from mynextmove.org which is powered by O\*NET
- Additional information on occupations within this cluster can be found at engage.pathway2careers.com

Technology	Knowledge	Skills	Abilities
Data base user interface and query software Database software; Microsoft Access Presentation software Microsoft PowerPoint Electronic mail software Email software; Microsoft Outlook	Arts and Humanities English language Education and Training teaching and course design Business customer service; administrative services Safety and Government public safety and security	Basic Skills listening to others, not interrupting, and asking good questions; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems figuring out how a system should work and how changes in the future will affect it; thinking about the pros and cons of different options and picking the best one	Verbal communicate by speaking; listen and understand what people say Ideas and Logic make general rules or come up with answers from lots of detailed information; notice when problems happen
Data base user interface and query software Microsoft Access; Structured query language SQL Presentation software Microsoft PowerPoint Financial analysis software General Examination System GENESYS; PricewaterhouseCoopers TeamMate	Arts and Humanities English language Business accounting and economics; management Safety and Government law and government Math and Science arithmetic, algebra, geometry, calculus, or statistics	Basic Skills reading work related information; thinking about the pros and cons of different ways to solve a problem Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will	Verbal read and understand what is written; communicate by speaking Ideas and Logic make general rules or come up with answers from lots of detailed information; use rules to solve problems Math choose the right type of math to solve a problem; add, subtract, multiply, or divide Visual Understanding

affect it

Visual Understanding

see hidden patterns

## **Career Cluster Map**

The P2C Career Cluster Maps provide an overview of regional high-demand occupations associated with various job zones (i.e., levels of education and training). The purpose of these maps is to assist educators and students in developing awareness of entry and exit points within a particular career field. In using this information, educators and students can quickly gain a sense of potential high-value career opportunities and the level of education and training needed to prepare for these professions. This can promote the alignment of education practices with regional careers and assist students in making informed career decisions that take into account regional labor market demands.

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
*	<b>Court, Municipal, and License Clerks</b> Annual Openings = 110 Median Wage = \$37,500	<b>Compliance Officers</b> Annual Openings = 136 Median Wage = \$60,040	Occupational Health and Safety Specialists Annual Openings = 99 Median Wage = \$79,010	<b>Urban and Regional Planners</b> Annual Openings = 49 Median Wage = \$60,500
*	<b>Agricultural Inspectors</b> Annual Openings = 15 Median Wage = \$38,380	<b>Eligibility Interviewers,</b> <b>Government Programs</b> Annual Openings = 82 Median Wage = \$44,030	<b>Transportation Inspectors</b> Annual Openings = 13 Median Wage = \$61,970	*
*	<b>Transportation Security</b> <b>Screeners</b> Annual Openings = 14 Median Wage = \$41,200	<b>Construction and Building</b> <b>Inspectors</b> Annual Openings = 61 Median Wage = \$57,140	<b>Emergency Management Directors</b> Annual Openings = 11 Median Wage = \$87,670	*
*	<b>Postmasters and Mail Superintendents</b> Annual Openings = 9 Median Wage = \$75,520	Tax Examiners and Collectors, and Revenue Agents Annual Openings = 15 Median Wage = \$39,440	<b>Financial Examiners</b> Annual Openings = 7 Median Wage = \$61,940	*
*	*	<b>Occupational Health and Safety Technicians</b> Annual Openings = 8 Median Wage = \$47,410	<b>Legislators</b> Annual Openings = *** Median Wage = \$21,840	*

\* There are no occupations in this Job Zone for this cluster.

**Data Sources** Aligned with O\*NET job zone classification system



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# **Health Science**

Where do medical technologies and human touch intersect? They meet within the Health Science career cluster, which is a New Mexico and national growth industry. As the proportion of Americans over age 65 grows and more people survive serious injuries and other health issues, the need for healthcare has increased. If you want to work in a cluster that has good job growth, this cluster may be for you. It is expected to include the greatest number of new jobs in New Mexico over the next 10 years and about one third of the state's hot jobs.

Hospitals or doctors' offices usually come to mind first when we think about healthcare workplaces, but home health care organizations and nursing homes also employ workers in this cluster. Some employees in this industry have 8 to 5 schedules, while others work less traditional shifts.

> If you're thinking about a healthcare career, many jobs require good math and science skills. Jobs in this industry include a wide variety of educational backgrounds, ranging from medical degrees to many jobs that require less than four years of college.

# **Core Skills**

- Science
- Service Orientation
- Social Perceptiveness
- Learning Strategies
- Active Learning

- Writing
- Instructing
- **Reading Comprehension**
- Active Listening
- Monitoring

## **Career Pathways and Occupations**

# **Occupation**

**Community & Social Service** 

**Support Services Pathway** 

Mental Health & Substance Abuse Social Workers

#### **Food Preparation & Serving Related**

First Line Supervisors of Food Preparation & Serving Workers; Cooks, Institution & Cafeteria

#### Biotechnology Research & Development Pathway

Architecture & Engineering **Biomedical Engineers** 

**Computer & Mathematical** Other Computer Occupations

Education, Training & Library Health Specialties Teachers, Postsecondary

**Healthcare Practitioners & Technicians** Pharmacists

**Healthcare Practitioners & Technicians** 

Dietitians, Nutritionists, Clinical Laboratory Technologists and Technicians, Emergency Medical Technicians & Paramedics

**Production Occupations** Food Batchmakers

**Healthcare Support Medical Equipment Preparers** 

Life, Physical & Social Science Medical Scientists, Except Epidemiologists; Other Biological Scientists

Management Natural Sciences Managers

#### **Diagnostic Services Pathway**

#### **Education, Training & Library**

Health Specialties Teachers, Postsecondary

#### **Healthcare Practitioners & Technicians**

Emergency Medical Technicians & Paramedics; Medical & Clinical Laboratory Technicians; Radiologic Technologists; Physician Assistants; Other Health Technologists & Technicians; Medical & Clinical Laboratory Technologists; Surgical Technologists; Diagnostic Medical Sonographers; Ophthalmic Medical Technicians; Cardiovascular Technologists & Technicians; Other Health Diagnosing & Treating Practitioners; Other Healthcare Practitioners & Technical Workers; Nuclear Medicine Technologists; Radiation Therapists; Athletic Trainers; Respiratory Therapy Technicians

#### **Healthcare Support**

Medical Assistants; Other Healthcare Support Workers; Veterinary Assistants & Laboratory Animal Caretakers; Medical Equipment Preparers

Life, Physical & Social Science **Other Physical Scientists** 

Management Medical & Health Services Managers

Production **Ophthalmic Laboratory Technicians** 

**Transportation & Material Moving** 

Ambulance Drivers & Attendants, Except Emergency Medical Technicians

# **Career Pathways and Occupations**

### **Health Informatics Pathway**

#### Architecture & Engineering

Other Engineers

### Arts, Design, Entertainment, Sports & Media

Public Relations Specialists; Editors; Fine Artists, Including Painters, Sculptors & Illustrators

#### Business & Financial Operations Claims Adjusters, Examiners & Investigators

#### **Community & Social Service**

Mental Health Counselors; Rehabilitation Counselors; Substance Abuse & Behavioral Disorder Counselors; Health Educators

#### **Computer & Mathematical**

Software Developers, Applications; Computer User Support Specialists; Computer Programmers

#### Education, Training & Library

Health Specialties Teachers, Postsecondary; Communications Teachers, Postsecondary

#### **Therapeutic Services Pathway**

#### **Community & Social Service**

Social & Human Service Assistants; Other Community & Social Service Specialists; Substance Abuse & Behavioral Disorder Counselers

#### Education, Training & Library

Health Specialties Teachers, Postsecondary; Art, Drama & Music Teachers, Postsecondary; Nursing Instructors & Teachers, Postsecondary; Psychology Teachers, Postsecondary

#### **Healthcare Practitioners & Technicians**

Registered Nurses; Licensed Practical & Licensed Vocational Nurses; Pharmacy Technicians; Other Physicians & Surgeons; Pharmacists; Medical & Clinical Laboratory Technicians; Family & General Practitioners; Dentists, General; Speech-Language Pathologists; Nurse Practitioners; Veterinary Technologists & Technicians; Respiratory Therapists; Veterinarians; Diagnostic Medical Sonographers; Nurse Anesthetists; Surgeons; Opticians, Dispensing; Dietitians & Nutritionists; Internists, General; Other Health Diagnosing & Treating Practitioners; Chiropractors; Optometrists; Other Healthcare Practitioners & Technical Workers; Anesthesiologists; Obstetricians & Gynecologists; Pediatricians, General; Nuclear Medicine Technologists; Radiation Therapists; Audiologists; Athletic Trainers; Psychiatrists; Recreational Therapists; Occupational Health & Safety Technicians; Respiratory Therapy Technicians

#### Healthcare Practitioners & Technicians

Physical Therapists; Medical Records & Health Information Technicians; Psychiatric Technicians; Occupational Therapists; Occupational Health & Safety Technicians

#### Healthcare Support

Medical Assistants; Medical Transcriptionists; Psychiatric Aides

#### Management

Medical & Health Services Managers; Administrative Services Managers

#### Office & Administrative Support

First-Line Supervisors of Office & Administrative Support Workers; Receptionists & Information Clerks; Executive Secretaries & Executive Administrative Assistants; Billing & Posting Clerks; Medical Secretaries

#### Production

Dental Laboratory Technicians; Medical Appliance Technicians

#### Healthcare Support

Nursing Assistants; Medical Assistants; Dental Assistants; Massage Therapists; Other Heathcare Support Workers; Physical Therapist Assistants; Medical Equipment Preparers; Psychiatric Aides; Occupational Therapy Assistants; Physical Therapist Aides; Orderlies

#### Life, Physical & Social Science

Medical Scientists, Except Epidemiologists; Clinical, Counseling & School Psychologists; Other Life, Physical & Social Science Technicians

#### Management

Medical & Health Services Managers

#### Office & Administrative Support Medical Secretaries

#### Production

Dental Laboratory Technicians; Ophthalmic Laboratory Technicians

Uccupation



### **DID YOU KNOW?**

**On the job, a Physical Therapist would:** Plan, prepare, or carry out individually designed programs of physical treatment to maintain, improve, or restore physical functioning, alleviate pain, or prevent physical dysfunction in patients.

Perform and document an initial exam, evaluating data to identify problems and determine a diagnosis prior to intervention.

Record prognosis, treatment, response, and progress in patient's chart or enter information into computer.

Source: P2C Career Explorer, engage.pathway2careers.com





**Top 10 High-Value Careers in New Mexico** For a complete list of careers within this cluster and to review occupations specific to your workforce region, visit <u>careerpathways-nm.com</u>.

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Registered Nurses	Therapeutic Services	Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required.	4	SIC	1,300	\$78,340
Medical Secretaries and Administrative Assistants	Health Informatics	Perform secretarial duties using specific knowledge of medical terminology and hospital, clinic, or laboratory procedures. Duties may include scheduling appointments, billing patients, and compiling and recording medical charts, reports, and correspondence.	2	CS	526	\$36,930
Dental Assistants	Therapeutic Services	Perform limited clinical duties under the direction of a dentist. Clinical duties may include equipment preparation and sterilization, preparing patients for treatment, assisting the dentist during treatment, and providing patients with instructions for oral healthcare procedures. May perform administrative duties such as scheduling appointments, maintaining medical records, billing, and coding information for insurance purposes.	3	CRS	326	\$37,250
Medical and Health Services Managers	Support Services	Plan, direct, or coordinate medical and health services in hospitals, clinics, managed care organizations, public health agencies, or similar organizations.	4	ECS	224	\$102,310

Technology	Knowledge	Skills	Abilities
Medical software eClinicalWorks EHR software; Epic Systems Word processing software Google Docs; Microsoft Word Data base user interface and query software Database software; Microsoft Access	Math and Science psychology; arithmetic, algebra, geometry, calculus, or statistics Business customer service; administrative services Health medicine and dentistry; therapy and counseling Arts and Humanities English language	Basic Skills listening to others, not interrupting, and asking good questions; talking to others Problem Solving noticing a problem and figuring out the best way to solve it Social understanding people's reactions; changing what is done based on other people's actions	Verbal communicate by speaking; listen and understand what people say Ideas and Logic notice when problems happen; use rules to solve problems Visual Understanding see hidden patterns; quickly compare groups of letters, numbers, pictures, or other things Attention do two or more things at the same time
Medical software Epic Systems; MEDITECH software Word processing software Google Docs; Microsoft Word Accounting software Billing software; Intuit QuickBooks	Business customer service; administrative services Arts and Humanities English language Health medicine and dentistry Engineering and Technology computers and electronics	Basic Skills talking to others; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it	Verbal communicate by speaking; listen and understand what people say Attention do two or more things at the same time
Spreadsheet software Microsoft Excel Medical software Henry Schein Dentrix; The Systems Workplace TDOCS Electronic mail software Email software	Business customer service; management Health medicine and dentistry Arts and Humanities English language Engineering and Technology computers and electronics	<b>Basic Skills</b> listening to others, not interrupting, and asking good questions; talking to others <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it	Verbal communicate by speaking; listen and understand what people say Hand and Finger Use keep your arm or hand steady; put together small parts with your fingers Ideas and Logic use rules to solve problems; order or arrange things Attention do two or more things at the same time
Medical software eClinicalWorks EHR software; Epic Systems Data base user interface and query software Blackboard software; Yardi software	Business management; customer service Arts and Humanities English language Education and Training teaching and course design Engineering and Technology	Basic Skills talking to others; thinking about the pros and cons of different ways to solve a problem <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it <b>Social</b>	Verbal listen and understand what people say; read and understand what is written Ideas and Logic make general rules or come up with answers from lots of detailed

Analytical or scientific software IBM SPSS Statistics; SAS **Engineering and Technology** computers and electronics

#### Social

understanding people's reactions; bringing people together to solve differences

with answers nonnots of detailed information; notice when problems happen

Å.

HEALTH SCIENCE

HEALTH SCIENCE

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Pharmacy Technicians	Therapeutic Services	Prepare medications under the direction of a pharmacist. May measure, mix, count out, label, and record amounts and dosages of medications according to prescription orders.	3	CR	213	\$36,690
Licensed Practical and Licensed Vocational Nurses	Therapeutic Services	Care for ill, injured, or convalescing patients or persons with disabilities in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. May work under the supervision of a registered nurse. Licensing required.	3	SR	173	\$57,490
Nurse Practitioners	Therapeutic Services	Diagnose and treat acute, episodic, or chronic illness, independently or as part of a healthcare team. May focus on health promotion and disease prevention. May order, perform, or interpret diagnostic tests such as lab work and x rays. May prescribe medication. Must be registered nurses who have specialized graduate education.	5	SIR	141	\$121,070
Radiologic Technologists and Technicians	Diagnostic Services	Take x-rays and CAT scans or administer nonradioactive materials into patient's bloodstream for diagnostic or research purposes. Includes radiologic technologists and technicians who specialize in other scanning modalities.	3	RSC	133	\$60,920

			HEALTH SCIENCE
Technology	Knowledge	Skills	Abilities
<b>Spreadsheet software</b> Microsoft Excel <b>Presentation software</b> Microsoft PowerPoint <b>Medical software</b> MEDITECH software; Pharmaceutical software	Business customer service; administrative services Health medicine and dentistry Math and Science arithmetic, algebra, geometry, calculus, or statistics Arts and Humanities English language	<b>Basic Skills</b> listening to others, not interrupting, and asking good questions; reading work related information <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it	Verbal communicate by speaking; listen and understand what people say Ideas and Logic notice when problems happen; order or arrange things Hand and Finger Use put together small parts with your fingers; hold or move items with your hands Attention do two or more things at the same time
Medical software Epic Systems; MEDITECH software Video conferencing software FaceTime; Zoom Electronic mail software Microsoft Exchange; Microsoft Outlook	Business customer service; management Arts and Humanities English language Math and Science psychology; arithmetic, algebra, geometry, calculus, or statistics Health medicine and dentistry	Basic Skills keeping track of how well people and/ or groups are doing in order to make improvements; listening to others, not interrupting, and asking good questions Social looking for ways to help people; changing what is done based on other people's actions Problem Solving noticing a problem and figuring out the best way to solve it	Verbalcommunicate by speaking; listen and understand what people sayIdeas and Logicnotice when problems happen; make general rules or come up with answers from lots of detailed informationAttention do two or more things at the same time; pay attention to something without being distractedHand and Finger Use hold or move items with your hands
Medical software eClinicalWorks EHR software; Epic Systems Presentation software Microsoft PowerPoint Internet browser software Microsoft Internet Explorer; Web browser software	Health medicine and dentistry; therapy and counseling Arts and Humanities English language Math and Science biology; psychology Business customer service	Basic Skills listening to others, not interrupting, and asking good questions; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it Social understanding people's reactions; looking for ways to help people	Verbal read and understand what is written; communicate by speaking Ideas and Logic make general rules or come up with answers from lots of detailed information; notice when problems happen Visual Understanding see hidden patterns; quickly know what you are looking at Attention

Spreadsheet software Microsoft Excel

Presentation software Microsoft PowerPoint

**Medical software** MEDITECH software; Virtual reality computed tomography CT imaging software

## Health

medicine and dentistry Arts and Humanities English language **Business** 

customer service; administrative services

**Engineering and Technology** computers and electronics

#### **Basic Skills**

listening to others, not interrupting, and asking good questions; reading work related information

#### Social

understanding people's reactions; looking for ways to help people

#### Verbal

time

listen and understand what people say; communicate by speaking Ideas and Logic

do two or more things at the same

notice when problems happen; order or arrange things

**HEALTH SCIENCE** 

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Physical Therapist Assistants	Therapeutic Services	Assist physical therapists in providing physical therapy treatments and procedures. May, in accordance with state laws, assist in the development of treatment plans, carry out routine functions, document the progress of treatment, and modify specific treatments in accordance with patient status and within the scope of treatment plans established by a physical therapist. Generally requires formal training.	3	SRI	123	\$59,590
Physical Therapists	Therapeutic Services	Assess, plan, organize, and participate in rehabilitative programs that improve mobility, relieve pain, increase strength, and improve or correct disabling conditions resulting from disease or injury.	5	SIR	110	\$95,590

#### Data Sources:

- The list of High-Value Occupations have been derived by analysis of the data from the U.S. Department of Labor, Employment and Training Administration (USDOL/ETA) and New Mexico Workforce Connection.
- Detailed descriptors such as Technology, Knowledge, Skills, Abilities have been taken from mynextmove.org which is powered by O\*NET
- Additional information on occupations within this cluster can be found at engage.pathway2careers.com

			HEALTH SCIENCE
Technology	Knowledge	Skills	Abilities
Data base user interface and query software FileMaker Pro; Microsoft Access <b>Presentation software</b> Microsoft PowerPoint <b>Medical software</b> eClinicalWorks EHR software; TherAssist	Business customer service Health therapy and counseling; medicine and dentistry Arts and Humanities English language Education and Training teaching and course design	Basic Skills listening to others, not interrupting, and asking good questions; keeping track of how well people and/or groups are doing in order to make improvements Problem Solving noticing a problem and figuring out the best way to solve it Social understanding people's reactions; looking for ways to help people	Verbal communicate by speaking; listen and understand what people say Ideas and Logic notice when problems happen; make general rules or come up with answers from lots of detailed information Attention pay attention to something without being distracted Hand and Finger Use keep your arm or hand steady
Word processing software Exercise routine creation software; Microsoft Word Medical software Clinicient Insight; MEDITECH software Spreadsheet software Microsoft Excel	Business customer service; management Health therapy and counseling; medicine and dentistry Math and Science psychology; biology Arts and Humanities English language	Basic Skills listening to others, not interrupting, and asking good questions; reading work related information Social looking for ways to help people; understanding people's reactions Problem Solving noticing a problem and figuring out the best way to solve it	Verbal communicate by speaking; listen and understand what people say Ideas and Logic make general rules or come up with answers from lots of detailed information; notice when problems happen Hand and Finger Use keep your arm or hand steady; put together small parts with your fingers Attention pay attention to something without being distracted

**HEALTH SCIENCE** 

### **Career Cluster Map**

The P2C Career Cluster Maps provide an overview of regional high-demand occupations associated with various job zones (i.e., levels of education and training). The purpose of these maps is to assist educators and students in developing awareness of entry and exit points within a particular career field. In using this information, educators and students can quickly gain a sense of potential high-value career opportunities and the level of education and training needed to prepare for these professions. This can promote the alignment of education practices with regional careers and assist students in making informed career decisions that take into account regional labor market demands.

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
*	<b>Medical Secretaries and Administrative Assistants</b> Annual Openings = 526 Median Wage = \$36,930	<b>Medical Assistants</b> Annual Openings = 1154 Median Wage = \$30,750	<b>Registered Nurses</b> Annual Openings = 1300 Median Wage = \$78,340	<b>Nurse Practitioners</b> Annual Openings = 141 Median Wage = \$121,070
*	Veterinary Assistants and Laboratory Animal Caretakers Annual Openings = 116 Median Wage = \$28,540	<b>Nursing Assistants</b> Annual Openings = 689 Median Wage = \$29,600	<b>Medical and Health Services</b> <b>Managers</b> Annual Openings = 224 Median Wage = \$102,310	<b>Physical Therapists</b> Annual Openings = 110 Median Wage = \$95,590
*	<b>Physical Therapist Aides</b> Annual Openings = 41 Median Wage = \$29,080	<b>Dental Assistants</b> Annual Openings = 326 Median Wage = \$37,250	<b>Recreational Therapists</b> Annual Openings = 12 Median Wage = \$37,240	<b>Speech-Language</b> <b>Pathologists</b> Annual Openings = 86 Median Wage = \$78,930
*	<b>Psychiatric Aides</b> Annual Openings = 38 Median Wage = \$24,120	<b>Pharmacy Technicians</b> Annual Openings = 213 Median Wage = \$36,690	<b>Bioengineers and</b> <b>Biomedical Engineers</b> Annual Openings = *** Median Wage = \$108,770	<b>Pharmacists</b> Annual Openings = 78 Median Wage = \$128,500
*	<b>Medical Equipment</b> <b>Preparers</b> Annual Openings = 37 Median Wage = \$37,610	<b>Licensed Practical and</b> <b>Licensed Vocational Nurses</b> Annual Openings = 173 Median Wage = \$57,490	<b>Exercise Physiologists</b> Annual Openings = *** Median Wage = \$47,860	<b>Physician Assistants</b> Annual Openings = 72 Median Wage = \$128,160

\* There are no occupations in this Job Zone for this cluster.

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# **Hospitality & Tourism**

When you pick up takeout food, eat in a restaurant or cafeteria, and enjoy food at catered events, you're helping support the hospitality industry. If you travel and stay in a hotel, bed-and-breakfast, or RV park, the tourism industry benefits. Going to baseball games, casinos, and museums are other activities that contribute to this industry's part of the economy.

As in most clusters, technology has changed how people work and serve customers. Some restaurants have recently decided to give customers tablets to use for ordering and paying for meals and for playing games while waiting to be served. Computer systems allow managers to track inventory and to set up worker schedules.

Hospitality and tourism occupations include many entry level positions. Although some management jobs require postsecondary education, a high school diploma is sufficient for a number of occupations. The work environment for these occupations varies according to job function. Kitchen employees work in hot, noisy surroundings while event planners may spend much of their time in an office. Tourism workers often have schedules that depend on their locations and on special events and seasons. Industries that tend to employ the highest number of hospitality and tourism workers include full-service and fastfood restaurants, hotels and motels, janitorial companies, and public schools.

## **Core Skills**

- Service Orientation
- Social Perceptiveness
- Coordination
- Management of Financial Resources
- Management of Personnel Resources
- Negotiation

- Management of Material Resources
- Persuasion
- Monitoring
- Speaking
- Resume Building
- Networking

## **Career Pathways and Occupations**

#### **Travel & Tourism Pathway**

#### Business & Financial Operations

Meeting, Convention, & Event Planners

#### Management

Other Managers; Food Service Managers; Lodging Managers

Office & Administrative Support Reservation & Transportation Ticket Agents & Travel Clerks

Residential Advisors; Concierges; Baggage Porters & Bellhops;

Personal Care & Service Tour Guides; Travel Agents; Interpreters & Translators

#### Lodging Pathway

#### **Building & Grounds Cleaning & Maintenance** Janitors & Cleaners, Except Maids & Housekeeping Cleaners; First-Line Supervisors of Housekeeping & Janitorial Workers

#### Management

Food Services Managers; Lodging Managers

#### **Recreation, Amusements & Attractions Pathway**

#### Arts, Design, Entertainment, Sports & Media

Athletes & Sports Competitors; Umpires, Referees & Other Sports Officials; Set & Exhibit Designers; Motion Picture Projectionists

#### Education, Training & Library

Self-Enrichment Education Teachers; Museum Technicians & Conservators

#### Switchboard Operators; Ushers; Lobby Attendants & Ticket Takers

Personal Care & Service

### Management

Lodging Managers; Natural Sciences Managers; Gaming Managers

Personal Care & Service Recreation Workers; Animal Trainers

#### **Restaurants & Food/Beverage Services Pathway**

#### Food Preparation & Serving Related

First-Line Supervisors of Food Preparation & Serving Workers; Cooks, Restaurant; Cooks, Institution & Cafeteria; Chefs & Head Cooks; Bakers

#### Management

Food Service Managers; First-Line Supervisors of Food Preparation & Serving Workers

#### Production

Slaughterers & Meat Packers; Meat, Poultry & Fish Cutters & Trimmers; Bakers; Butchers & Meat Cutters; Separating, Filtering, Clarifying, Precipitating & Still Machine Setters, Operators & Tenders

Uccupation



## **HOSPITALITY & TOURISM**

**Top 10 High-Value Careers in New Mexico** For a complete list of careers within this cluster and to review occupations specific to your workforce region, visit <u>careerpathways-nm.com</u>.

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
First-Line Supervisors of Housekeeping and Janitorial Workers	Lodging	Directly supervise and coordinate work activities of cleaning personnel in hotels, hospitals, offices, and other establishments.	2	ECR	248	\$37,230
Food Service Managers	Restaurants and Food/ Beverage Services	Plan, direct, or coordinate activities of an organization or department that serves food and beverages.	2	ECR	178	\$58,350
Reservation and Transportation Ticket Agents and Travel Clerks	Travel and Tourism	Make and confirm reservations for transportation or lodging, or sell transportation tickets. May check baggage and direct passengers to designated concourse, pier, or track; deliver tickets and contact individuals and groups to inform them of package tours; or provide tourists with travel or transportation information.	2	CES	92	\$47,700
Chefs and Head Cooks	Restaurants and Food/ Beverage Services	Direct and may participate in the preparation, seasoning, and cooking of salads, soups, fish, meats, vegetables, desserts, or other foods. May plan and price menu items, order supplies, and keep records and accounts.	3	ERA	80	\$46,470



Technology	Knowledge	Skills	Abilities
Electronic mail software Email software; Microsoft Outlook Presentation software Microsoft PowerPoint Data base user interface and query software Facility use software; Microsoft Access	Business customer service; management Arts and Humanities English language Education and Training teaching and course design Safety and Government public safety and security	Basic Skills keeping track of how well people and/ or groups are doing in order to make improvements; talking to others Problem Solving noticing a problem and figuring out the best way to solve it Social changing what is done based on other people's actions; looking for ways to help people	<b>Verbal</b> communicate by speaking; listen and understand what people say <b>Ideas and Logic</b> notice when problems happen; order or arrange things
Word processing software Google Docs; Microsoft Word Point of sale POS software ClubSoft Food & Beverage Point of Sale; Restaurant Manager Analytical or scientific software Aurora FoodPro; SweetWARE nutraCoster	Business customer service; management Arts and Humanities English language Education and Training teaching and course design Manufactured or Agricultural Goods food production	Basic Skillskeeping track of how well people and/or groups are doing in order to makeimprovements; listening to others, notinterrupting, and asking good questionsSociallooking for ways to help people; changingwhat is done based on other people'sactionsResource Managementselecting and managing the best workersfor a job; managing your time and thetime of other people	Verbal communicate by speaking; listen and understand what people say Ideas and Logic notice when problems happen; use rules to solve problems Hand and Finger Use hold or move items with your hands; keep your arm or hand steady
Data base user interface and query software Amadeus Altea Reservation; Microsoft Access Presentation software Microsoft PowerPoint Electronic mail software Email software; Microsoft Outlook	Business customer service Arts and Humanities English language Engineering and Technology computers and electronics Safety and Government public safety and security	Basic Skills listening to others, not interrupting, and asking good questions; talking to others Social looking for ways to help people; understanding people's reactions Problem Solving noticing a problem and figuring out the best way to solve it	<b>Verbal</b> communicate by speaking; listen and understand what people say <b>Ideas and Logic</b> order or arrange things; notice when problems happen
Spreadsheet software Google Sheets; Microsoft Excel Instant messaging software GroupMe Data base user interface and query software Culinary Software Services ChefTec; ReServe Interactive	Manufactured or Agricultural Goods food production; manufacture and distribution of products Business customer service; management Education and Training teaching and course design Math and Science arithmetic, algebra, geometry,	Basic Skills keeping track of how well people and/ or groups are doing in order to make improvements; talking to others Social changing what is done based on other people's actions; understanding people's reactions Resource Management managing your time and the time of other	Verbal communicate by speaking; listen and understand what people say Ideas and Logic notice when problems happen; use rules to solve problems Attention pay attention to something without being distracted; do two or more things at the same time

arithmetic, algebra, geometry,

calculus, or statistics

managing your time and the time of other Hand and Finger Use

people; selecting and managing the best

workers for a job

hold or move items with your hands

**HOSPITALITY & TOURISM** 

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage	
First-Line Supervisors of Gaming Services Workers	Recreation, Amusements & Attractions	Directly supervise and coordinate activities of workers in assigned gambling areas. May circulate among tables, observe operations, and ensure that stations and games are covered for each shift. May verify and pay off jackpots. May reset slot machines after payoffs and make repairs or adjustments to slot machines or recommend removal of slot machines for repair. May plan and organize activities and services for guests in hotels/ casinos.	2	ECR	61	\$47,310	
Lodging Managers	Lodging	Plan, direct, or coordinate activities of an organization or department that provides lodging and other accommodations.	4	ECS	52	\$60,320	
Gaming Managers	Recreation, Amusements and Attractions	Plan, direct, or coordinate gambling operations in a casino. May formulate house rules.	3	EC	10	\$76,730	

#### **Data Sources:**

- The list of High-Value Occupations have been derived by analysis of the data from the U.S. Department of Labor, Employment and Training Administration (USDOL/ETA) and New Mexico Workforce Connection.
- Detailed descriptors such as Technology, Knowledge, Skills, Abilities have been taken from mynextmove.org which is powered by O\*NET
- Additional information on occupations within this cluster can be found at engage.pathway2careers.com

## **HOSPITALITY & TOURISM**

### Knowledge

Skills

#### Abilities

#### Office suite software

Corel WordPerfect Office Suite; Microsoft Office software Presentation software Microsoft PowerPoint Spreadsheet software Microsoft Excel

**Arts and Humanities** 

management; human resources

arithmetic, algebra, geometry,

Engineering and Technology

computers and electronics

calculus, or statistics; psychology

English language

Math and Science

**Business** 

(HR)

Business customer service; management Arts and Humanities English language Math and Science arithmetic, algebra, geometry, calculus, or statistics; psychology Engineering and Technology computers and electronics

#### **Basic Skills**

keeping track of how well people and/ or groups are doing in order to make improvements; listening to others, not interrupting, and asking good questions **Social** 

looking for ways to help people; understanding people's reactions

Problem Solving

noticing a problem and figuring out the best way to solve it

#### Verbal

listen and understand what people say; communicate by speaking

#### Attention

pay attention to something without being distracted

#### Ideas and Logic

notice when problems happen; use rules to solve problems

#### Memory

remember words, numbers, pictures, or steps

#### Electronic mail software

Email software; Microsoft Outlook Presentation software Microsoft PowerPoint Facilities management software

Facilities management software M-Tech Hotel Service Optimization System HotSOS; UniResMan

#### Business

customer service; management

### Arts and Humanities

English language **Math and Science** arithmetic, algebra, geometry,

#### anumetic, algebra, geometry, calculus, or statistics; psychology

Engineering and Technology computers and electronics

## listening to others, not interrupting, and asking good questions: talking to others

**Basic Skills** 

asking good questions; talking to others **Social** 

looking for ways to help people; understanding people's reactions

#### Problem Solving noticing a problem and figuring out the

best way to solve it

#### **Basic Skills**

thinking about the pros and cons of different ways to solve a problem; keeping track of how well people and/ or groups are doing in order to make improvements

#### **Problem Solving**

noticing a problem and figuring out the best way to solve it

#### Social

changing what is done based on other people's actions; looking for ways to help people

#### Verbal

communicate by speaking; communicate by writing Ideas and Logic notice when problems happen; order or arrange things Math choose the right type of math to

#### Verbal

communicate by speaking; listen and understand what people say

#### Ideas and Logic

solve a problem

make general rules or come up with answers from lots of detailed information; notice when problems happen

#### **Visual Understanding**

see hidden patterns; quickly compare groups of letters, numbers, pictures, or other things

#### Math

add, subtract, multiply, or divide

#### Spreadsheet software Microsoft Excel Presentation software Microsoft PowerPoint Electronic mail software Microsoft Outlook
## **Career Cluster Map**

The P2C Career Cluster Maps provide an overview of regional high-demand occupations associated with various job zones (i.e., levels of education and training). The purpose of these maps is to assist educators and students in developing awareness of entry and exit points within a particular career field. In using this information, educators and students can quickly gain a sense of potential high-value career opportunities and the level of education and training needed to prepare for these professions. This can promote the alignment of education practices with regional careers and assist students in making informed career decisions that take into account regional labor market demands.

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
<b>Fast Food and Counter</b> <b>Workers</b> Annual Openings = 5637 Median Wage = \$23,070	<b>Waiters and Waitresses</b> Annual Openings = 3021 Median Wage = \$21,840	<b>Chefs and Head Cooks</b> Annual Openings = 80 Median Wage = \$46,470	<b>Recreation Workers</b> Annual Openings = 465 Median Wage = \$24,500	*
<b>Maids and Housekeeping Cleaners</b> Annual Openings = 1229 Median Wage = \$23,070	Janitors and Cleaners, Except Maids and Housekeeping Cleaners Annual Openings = 1876 Median Wage = \$27,450	<b>Travel Agents</b> Annual Openings = 18 Median Wage = \$30,250	<b>Lodging Managers</b> Annual Openings = 52 Median Wage = \$60,320	*
<b>Food Preparation Workers</b> Annual Openings = 1167 Median Wage = \$22,890	<b>Cooks, Restaurant</b> Annual Openings = 1712 Median Wage = \$28,780	<b>Gaming Managers</b> Annual Openings = 10 Median Wage = \$76,730	*	*
Dining Room and Cafeteria Attendants and Bartender Helpers Annual Openings = 587 Median Wage = \$23,120	<b>First-Line Supervisors of</b> <b>Food Preparation and</b> <b>Serving Workers</b> Annual Openings = 1175 Median Wage = \$30,370	<b>Concierges</b> Annual Openings = *** Median Wage = \$28,070	*	*
<b>Dishwashers</b> Annual Openings = 401 Median Wage = \$23,920	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop Annual Openings = 646 Median Wage = \$23,060	*	*	*

\* There are no occupations in this Job Zone for this cluster.



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# **Human Services**

From customer service representatives to mental health counselors to hairdressers, human services workers provide a wide range of assistance to individuals and families. People who choose to work in this cluster usually have a deep desire to enrich and make life easier for others. The Personal Care & Service and Community & Social Services industries show the largest projected job growth rate in New Mexico over the next 10 years, and is among the top 10 for total numbers of new jobs during that time.

What kinds of services do human services customers need? They may benefit from rehabilitation therapy, psychological assistance, help with daily activities such as meal preparation or housekeeping, spiritual guidance, or health education. Their needs have an impact on where workers provide services. Psychologists and Social and Community Service Managers are likely to work in office settings. Others, like clergy and social workers, may work part of the time in an office and also visit people at home.

> Since the services provided in this industry vary greatly, workers in this cluster have educational backgrounds that range from high school diplomas to doctorates. They may also need credentials such as certifications and licenses. Day care centers, fitness and sports centers, social assistance organizations and local and state government tend to offer more human services jobs than other work settings.



# **Core Skills**

- Service Orientation
- Social Perceptiveness
- Instructing
- Learning Strategies
- Operations Analysis

- Persuasion
- Speaking
- Negotiation
- Writing
- Active Listening

# **Career Pathways and Occupations**

Early Childhood Development & Services Pathway

# Occupation

Occupation

Occupation

### Education, Training & Library

Preschool Teachers, Except Special Education

#### **Consumer Services Pathway**

#### Arts, Design, Entertainment, Sports & Media Public Relations Specialists; Writers & Authors; Technical Writers

Management Sales Managers; Marketing Managers; Property, Real Estate & Community Association Managers Office & Administrative Support Customer Service Reps

Sales & Related First-Line Supervisors of Retail Sales Workers

#### **Counseling & Mental Health Services Pathway**

### Arts, Design, Entertainment, Sports & Media

**Music Directors & Composers** 

#### **Community & Social Service**

Clergy; Other Religious Workers; Directors, Religious Activities & Education; Mental Health Counselors; Mental Health & Substance Abuse Social Workers; Rehabilitation Counselors; Healthcare Social Workers; Substance Abuse & Behavioral Disorder Counselors; Health Educators

#### Education, Training & Library

Mathematical Science Teachers, Postsecondary; Psychology Teachers, Postsecondary; Philosophy & Religion Teachers, Postsecondary; Social Work Teachers, Postsecondary Healthcare Practitioners & Technicians Other Physicians & Surgeons

Life, Physical, & Social Science Clinical, Counseling & School Psychologists

Management Social & Community Service Managers; Natural Science Managers

Personal Care & Service Recreation Workers



Occupation

# **Career Pathways and Occupations**

#### Family & Community Services Pathway

#### **Community & Social Service**

Clergy; Child, Family & School Social Workers; Social & Human Service Assistants; Directors, Religious Activities & Education; Healthcare Social Workers; Probation Officers & Correctional Treatment Specialists; Other Social Workers

Education, Training & Library Social Work Teachers, Postsecondary

Life, Physical & Social Science

Social Science Research Assistants; Other Social Scientists & Related Workers

#### Management

Other Managers; Chief Executives; Social & Community Service Managers

Office & Administrative Support Eligibility Interviewers, Government Programs

Personal Care & Service Residential Advisors

**Protective Service** Other Protective Service Workers

#### **Personal Care Services Pathway**

Healthcare Support Massage Therapists

#### **Personal Care & Service**

Hairdressers, Hairstylists & Cosmetologists; First-Line Supervisors of Personal Service Workers; Fitness Trainers & Aerobics Instructors; Funeral Attendants; Barbers; Morticians, Undertakers & Funeral Directors; Skincare Specialists **Production** Tailors, Dressmakers & Custom Sewers



### **DID YOU KNOW?**

**On the job, a Skincare Specialist would:** Sterilize equipment and clean work areas.

Examine clients' skin, using magnifying lamps or visors when necessary, to evaluate skin condition and appearance.

Cleanse clients' skin with water, creams, or lotions.

Source: P2C Career Explorer, engage.pathway2careers.com





**Top 10 High-Value Careers in New Mexico** For a complete list of careers within this cluster and to review occupations specific to your workforce region, visit <u>careerpathways-nm.com</u>.

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Social and Human Service Assistants	Family and Community Services	Assist other social and human service providers in providing client services in a wide variety of fields, such as psychology, rehabilitation, or social work, including support for families. May assist clients in identifying and obtaining available benefits and social and community services. May assist social workers with developing, organizing, and conducting programs to prevent and resolve problems relevant to substance abuse, human relationships, rehabilitation, or dependent care.	4	CSE	409	\$38,000
Child, Family, and School Social Workers	Family and Community Services	Provide social services and assistance to improve the social and psychological functioning of children and their families and to maximize the family well-being and the academic functioning of children. May assist parents, arrange adoptions, and find foster homes for abandoned or abused children. In schools, they address such problems as teenage pregnancy, misbehavior, and truancy. May also advise teachers.	4	SE	208	\$40,680
Healthcare Social Workers	Family and Community Services	Provide individuals, families, and groups with the psychosocial support needed to cope with chronic, acute, or terminal illnesses. Services include advising family caregivers. Provide patients with information and counseling, and make referrals for other services. May also provide case and care management or interventions designed to promote health, prevent disease, and address barriers to access to healthcare.	5	SI	142	\$60,040
Massage Therapists	Personal Care Services	Perform therapeutic massages of soft tissues and joints. May assist in the assessment of range of motion and muscle strength, or propose client therapy plans.	3	SR	122	\$38,330



Technology	Knowledge	Skills	Abilities
Data base user interface and query software Database software; Microsoft Access Presentation software Microsoft PowerPoint Medical software MEDITECH software; PointClickCare healthcare software	Business customer service; administrative services Math and Science psychology; sociology and anthropology Health therapy and counseling Arts and Humanities English language	Basic Skills listening to others, not interrupting, and asking good questions; talking to others Social understanding people's reactions; looking for ways to help people Problem Solving noticing a problem and figuring out the best way to solve it	<b>Verbal</b> communicate by speaking; communicate by writing <b>Ideas and Logic</b> notice when problems happen; use rules to solve problems
Data base user interface and query software Microsoft Access; Student information systems SIS Computer based training software EasyCBM Spreadsheet software Microsoft Excel	Business customer service; administrative services Health therapy and counseling Math and Science psychology; sociology and anthropology Arts and Humanities English language	Basic Skills listening to others, not interrupting, and asking good questions; talking to others Problem Solving noticing a problem and figuring out the best way to solve it Social understanding people's reactions; looking for ways to help people	Verbal communicate by speaking; listen and understand what people say Ideas and Logic notice when problems happen; make general rules or come up with answers from lots of detailed information
Office suite software Corel WordPerfect Office Suite; Microsoft Office software Presentation software Information presentation software; Microsoft PowerPoint Medical software Medical records software; MEDITECH software	Math and Science psychology; sociology and anthropology Health therapy and counseling Arts and Humanities English language; philosophy and religion Business customer service	Basic Skills talking to others; listening to others, not interrupting, and asking good questions <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it <b>Social</b> understanding people's reactions; looking for ways to help people	Verbal communicate by speaking; listen and understand what people say Ideas and Logic notice when problems happen; use rules to solve problems
Spreadsheet software Microsoft Excel Medical software ICS Software SammyUSA; WinCity Custom Software WinCity Massage SOAP Notes Word processing software Microsoft Word	Business customer service; sales and marketing Arts and Humanities English language Math and Science biology; psychology Health medicine and dentistry	<b>Basic Skills</b> listening to others, not interrupting, and asking good questions; talking to others <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it	Verbal communicate by speaking; listen and understand what people say Hand and Finger Use hold or move items with your hands; keep your arm or hand steady Endurance exercise for a long time without getting out of breath Physical Strength exercise for a long time without your muscles getting tired



# HUMAN SERVICES

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Health Education Specialists	Family and Community Services	Provide and manage health education programs that help individuals, families, and their communities maximize and maintain healthy lifestyles. Use data to identify community needs prior to planning, implementing, monitoring, and evaluating programs designed to encourage healthy lifestyles, policies, and environments. May link health systems, health providers, insurers, and patients to address individual and population health needs. May serve as resource to assist individuals, other health professionals, or the community, and may administer fiscal resources for health education programs.	4	SE	111	\$46,680
Community Health Workers	Family and Community Services	Promote health within a community by assisting individuals to adopt healthy behaviors. Serve as an advocate for the health needs of individuals by assisting community residents in effectively communicating with healthcare providers or social service agencies. Act as liaison or advocate and implement programs that promote, maintain, and improve individual and overall community health. May deliver health-related preventive services such as blood pressure, glaucoma, and hearing screenings. May collect data to help identify community health needs.	4	SIE	109	\$61,140
Social and Community Service Managers	Family and Community Services	Plan, direct, or coordinate the activities of a social service program or community outreach organization. Oversee the program or organization's budget and policies regarding participant involvement, program requirements, and benefits. Work may involve directing social workers, counselors, or probation officers.	4	ES	65	\$66,040
Mental Health and Substance Abuse Social Workers	Counseling and Mental Health Services	Assess and treat individuals with mental, emotional, or substance abuse problems, including abuse of alcohol, tobacco, and/or other drugs. Activities may include individual and group therapy, crisis intervention, case management, client advocacy, prevention, and education.	5	SIA	48	\$54,000

			HUMAN SERVICES
Technology	Knowledge	Skills	Abilities
Data base user interface and query software Blackboard software; Microsoft Access Web page creation and editing software Blogging software; Facebook Graphics or photo imaging software Adobe Systems Adobe Photoshop;	Business customer service; administrative services Education and Training teaching and course design Arts and Humanities English language Math and Science	Basic Skills listening to others, not interrupting, and asking good questions; talking to others Social understanding people's reactions; changing what is done based on other people's actions People and Technology Systems thinking about the pros and cons of different options and picking the best one;	Verbal communicate by speaking; communicate by writing Ideas and Logic make general rules or come up with answers from lots of detailed information; notice when problems happen

#### Office suite software

JamBoard

Google Workspace software; Microsoft Office software Video conferencing software Zoom Data base user interface and query software

Client databases; Microsoft Access

customer service; management **Arts and Humanities** English language **Education and Training** teaching and course design Health medicine and dentistry

teaching and course design

therapy and counseling;

medicine and dentistry

psychology; sociology and

Math and Science

**Arts and Humanities** 

philosophy and religion

English language;

customer service

anthropology

**Business** 

Health

psychology

**Business** 

#### **Basic Skills**

listening to others, not interrupting, and asking good questions; talking to others Social

figuring out how a system should work and how changes in the future will affect it

understanding people's reactions; looking for ways to help people

**Problem Solving** noticing a problem and figuring out the

best way to solve it

#### Verbal

listen and understand what people say; communicate by speaking **Ideas and Logic** notice when problems happen; use rules to solve problems

#### **Business** customer service; Spreadsheet software management IBM Lotus 1-2-3; Microsoft Excel **Arts and Humanities** Presentation software English language Microsoft PowerPoint Math and Science Data base user interface and query psychology; sociology and software anthropology FileMaker Pro; Microsoft Access **Education and Training**

figuring out how to use new ideas or things; keeping track of how well people and/or groups are doing in order to make improvements

#### **Problem Solving**

**Basic Skills** 

noticing a problem and figuring out the best way to solve it

**People and Technology Systems** thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it

#### Verbal

communicate by speaking; listen and understand what people say

#### Ideas and Logic

notice when problems happen; use rules to solve problems

#### Electronic mail software

Email software; Microsoft Outlook Presentation software Information presentation software;

Microsoft PowerPoint

#### Medical software

Client records software; Medical procedure coding software

**Basic Skills** 

### listening to others, not interrupting, and

asking good questions; talking to others

#### **Problem Solving**

noticing a problem and figuring out the best way to solve it

#### Social

understanding people's reactions; changing what is done based on other people's actions

#### Verbal

listen and understand what people say; communicate by speaking Ideas and Logic

notice when problems happen; make general rules or come up with answers from lots of detailed information



## HUMAN SERVICES

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Rehabilitation Counselors	Counseling and Mental Health Services	Counsel individuals to maximize the independence and employability of persons coping with personal, social, and vocational difficulties that result from birth defects, illness, disease, accidents, aging, or the stress of daily life. Coordinate activities for residents of care and treatment facilities. Assess client needs and design and implement rehabilitation programs that may include personal and vocational counseling, training, and job placement.	4	SI	38	\$38,500
Marriage and Family Therapists	Counseling and Mental Health Services	Diagnose and treat mental and emotional disorders, whether cognitive, affective, or behavioral, within the context of marriage and family systems. Apply psychotherapeutic and family systems theories and techniques in the delivery of services to individuals, couples, and families for the purpose of treating such diagnosed nervous and mental disorders.	5	SAI	26	\$49,410

#### Data Sources:

- The list of High-Value Occupations have been derived by analysis of the data from the U.S. Department of Labor, Employment and Training Administration (USDOL/ETA) and New Mexico Workforce Connection.
- Detailed descriptors such as Technology, Knowledge, Skills, Abilities have been taken from mynextmove.org which is powered by 0\*NET
- Additional information on occupations within this cluster can be found at engage.pathway2careers.com

HUMAN SERVICES

Technology	Knowledge	Skills	Abilities
<b>Electronic mail software</b> Email software; Microsoft Outlook <b>Presentation software</b> Microsoft PowerPoint <b>Internet browser software</b> Microsoft Mobile Explorer MME; Web browser software	Business customer service; administrative services Health therapy and counseling Education and Training teaching and course design Math and Science psychology	Basic Skills listening to others, not interrupting, and asking good questions; talking to others Social looking for ways to help people; understanding people's reactions People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	<b>Verbal</b> communicate by speaking; listen and understand what people say <b>Ideas and Logic</b> notice when problems happen; use rules to solve problems
Spreadsheet software Microsoft Excel Presentation software Microsoft PowerPoint Medical software eMDs Medisoft; Synergistic Office Solutions SOS Case Manager	Health therapy and counseling Math and Science psychology; sociology and anthropology Business customer service; administrative services Arts and Humanities English language	Basic Skills listening to others, not interrupting, and asking good questions; talking to others <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it <b>Social</b> understanding people's reactions; looking for ways to help people	Verbal communicate by speaking; listen and understand what people say Ideas and Logic make general rules or come up with answers from lots of detailed information; notice when problems happen



### **Career Cluster Map**

The P2C Career Cluster Maps provide an overview of regional high-demand occupations associated with various job zones (i.e., levels of education and training). The purpose of these maps is to assist educators and students in developing awareness of entry and exit points within a particular career field. In using this information, educators and students can quickly gain a sense of potential high-value career opportunities and the level of education and training needed to prepare for these professions. This can promote the alignment of education practices with regional careers and assist students in making informed career decisions that take into account regional labor market demands.

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
Laundry and Dry-Cleaning Workers Annual Openings = 229 Median Wage = \$23,570	<b>Childcare Workers</b> Annual Openings = 346 Median Wage = \$23,080	Exercise Trainers and Group Fitness Instructors Annual Openings = 358 Median Wage = \$31,520	Social and Human Service Assistants Annual Openings = 409 Median Wage = \$38,000	<b>Healthcare Social Workers</b> Annual Openings = 142 Median Wage = \$60,040
<b>Pressers, Textile, Garment, and Related Materials</b> Annual Openings = 10 Median Wage = \$22,620	<b>Funeral Attendants</b> Annual Openings = 34 Median Wage = \$29,630	Hairdressers, Hairstylists, and Cosmetologists Annual Openings = 282 Median Wage = \$23,470	<b>Child, Family, and School</b> <b>Social Workers</b> Annual Openings = 208 Median Wage = \$40,680	Mental Health and Substance Abuse Social Workers Annual Openings = 48 Median Wage = \$54,000
*	<b>Tailors, Dressmakers, and Custom Sewers</b> Annual Openings = *** Median Wage = \$28,230	<b>Massage Therapists</b> Annual Openings = 122 Median Wage = \$38,330	<b>Health Education Specialists</b> Annual Openings = 111 Median Wage = \$46,680	<b>Marriage and Family</b> <b>Therapists</b> Annual Openings = 26 Median Wage = \$49,410
*	*	<b>Residential Advisors</b> Annual Openings = 112 Median Wage = \$29,710	<b>Community Health Workers</b> Annual Openings = 109 Median Wage = \$61,140	<b>Clergy</b> Annual Openings = 19 Median Wage = \$62,670
*	*	<b>Skincare Specialists</b> Annual Openings = 13 Median Wage = \$47,490	Social and Community Service Managers Annual Openings = 65 Median Wage = \$66,040	<b>Psychologists</b> Annual Openings = 15 Median Wage = \$101,980

\* There are no occupations in this Job Zone for this cluster.



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# **Information Technology**

Maybe you used to shop more at the mall but now order things online. Smart electronics can give directions, and even turn on your oven while you're out. You can push a button to start your car and immediately stop to move the bicycle that showed up in your backup camera. Who's responsible for these tools?

Workers in the information technology (IT) industry develop the software and hardware that make our lives easier, and they fix and help us use these tools. As organizations and individuals face the threats and consequences of data theft, they need information security analysts to maintain online privacy. In New Mexico, this occupation has the highest expected percentage of new job growth in the IT career cluster. Because they occur in almost any industry, three IT occupations are likely to be among those that have the largest number of new jobs in New Mexico: applications software developers, computer user support specialists, and computer systems analysts.

> All IT jobs are professional, and most new jobs will require postsecondary education. IT careers can be found in many work settings. The kinds of organizations most likely to employ more IT workers include custom computer programming companies; computer systems design companies; corporate and regional managing offices; software publishers and data processing and hosting businesses.

> > IT has changed the technical skills required in many occupations. While reducing the availability of some jobs, it has also produced totally new career options. As IT continues to evolve, we will need to keep pace with its changes in our workplaces.

# **Core Skills**

- Programming
- Technology Design
- Operation Analysis
- Installation
- Systems Analysis

- Systems Evaluation
- Troubleshooting
- Equipment Selection
- Mathematics
- Science

# **Career Pathways and Occupations**

#### **Network Systems Pathway**

### **Computer & Mathematical**

Software Developers, Applications; Software Developers, Systems Software; Network & Computer Systems Administrators; Computer Programmers; Computer Network Support Specialists; Computer Network Architects; Information Security Analysts; Other Computer Occupations; Database Administrators

#### Education, Training & Library Computer Science Teachers, Postsecondary

#### Management

**Computer & Information Systems Managers** 

#### **Information Support & Services Pathway**

#### **Computer & Mathematical**

Software Applications Developers; Computer User Support Specialists; Computer Systems Analysts; Software Developers, Systems Software; Network & Computer Systems Administrators; Computer Network Architects; Other Computer Occupations; Database Administrators

#### **Education, Training & Library**

Computer Science Teachers, Postsecondary

#### Management

**Computer & Information Systems Managers** 

Production

Computer Numerically Controlled Machine Tool Programmers, Metal & Plastic

#### Programming & Software Development Pathway

# Occupation

#### Architecture & Engineering

**Computer Hardware Engineers** 

#### Computer & Mathematical

Software Applications Developers; Computer Systems Analysts; Software Developers, Systems Software; Network & Computer Systems Administrators; Computer Programmers; Computer Network Architects; Web Developers; Information Security Analysts; Database Administrators

#### Education, Training & Library

Computer Science Teachers, Postsecondary; Engineering Teachers, Postsecondary

#### Management

Computer & Information Systems Managers; Architectural & Engineering Managers

#### Production

Computer Numerically Controlled Machine Tool Programmers, Metal & Plastic

Occupation

# INFORMATION TECHNOLOGY

**Top 10 High-Value Careers in New Mexico** For a complete list of careers within this cluster and to review occupations specific to your workforce region, visit <u>careerpathways-nm.com</u>.

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Computer User Support Specialists	Information Support and Services	Provide technical assistance to computer users. Answer questions or resolve computer problems for clients in person, via telephone, or electronically. May provide assistance concerning the use of computer hardware and software, including printing, installation, word processing, electronic mail, and operating systems.	3	RIC	243	\$46,680
Information Security Analysts	Network Systems	Plan, implement, upgrade, or monitor security measures for the protection of computer networks and information. Assess system vulnerabilities for security risks and propose and implement risk mitigation strategies. May ensure appropriate security controls are in place that will safeguard digital files and vital electronic infrastructure. May respond to computer security breaches and viruses.	4	CIR	144	\$119,990
Computer Network Support Specialists	Network Systems	Analyze, test, troubleshoot, and evaluate existing network systems, such as local area networks (LAN), wide area networks (WAN), cloud networks, servers, and other data communications networks. Perform network maintenance to ensure networks operate correctly with minimal interruption.	4	REC	139	\$60,530
Computer Systems Analysts	Programming and Software Development	Analyze science, engineering, business, and other data processing problems to develop and implement solutions to complex applications problems, system administration issues, or network concerns. Perform systems management and integration functions, improve existing computer systems, and review computer system capabilities, workflow, and schedule limitations. May analyze or recommend commercially available software.	4	ICR	139	\$77,680

Technology	Knowledge	Skills	Abilities
Web platform development software Google Angular; Spring Framework Data base user interface and query software Blackboard software; ServiceNow Operating system software Apple iOS; Microsoft Windows Server	Engineering and Technology computers and electronics; mechanical Business customer service; management Communications telecommunications; multimedia Arts and Humanities English language	Basic Skills listening to others, not interrupting, and asking good questions; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	<b>Verbal</b> communicate by speaking; listen and understand what people say <b>Ideas and Logic</b> notice when problems happen; order or arrange things
Web platform development software Google Angular; Spring Framework Data base user interface and query software Amazon Elastic Compute Cloud EC2; Blackboard software Transaction security and virus protection software NortonLifeLock cybersecurity software; Stack smashing protection SSP software	Engineering and Technology computers and electronics; product and service development Arts and Humanities English language Business management; customer service Communications telecommunications	Basic Skills reading work related information; thinking about the pros and cons of different ways to solve a problem Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems figuring out how a system should work and how changes in the future will affect it; thinking about the pros and cons of different options and picking the best one	Verbal Iisten and understand what people say; read and understand what is written Ideas and Logic make general rules or come up with answers from lots of detailed information; notice when problems happen Visual Understanding see hidden patterns; quickly compare groups of letters, numbers, pictures, or other things
<b>Operating system software</b> Microsoft Windows Server; UNIX Shell <b>Presentation software</b> Microsoft PowerPoint <b>Network monitoring software</b> WildPackets OmniPeek Network Analyzer; Wireshark	Engineering and Technology computers and electronics; product and service development Communications telecommunications; multimedia Business customer service; management Arts and Humanities English language	Basic Skills thinking about the pros and cons of different ways to solve a problem; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	<b>Verbal</b> listen and understand what people say; communicate by speaking <b>Ideas and Logic</b> notice when problems happen; use rules to solve problems
Development environment software Oracle Java 2 Platform Enterprise Edition J2EE; Oracle SQL Developer Data base user interface and query software Blackboard software; ServiceNow Web platform development software React; Spring Framework	Engineering and Technology computers and electronics Business customer service; management Arts and Humanities English language Math and Science arithmetic, algebra, geometry, calculus, or statistics	Basic Skills talking to others; reading work related information People and Technology Systems figuring out how a system should work and how changes in the future will affect it; measuring how well a system is working and how to improve it Problem Solving noticing a problem and figuring out the best way to solve it	Verbal communicate by speaking; listen and understand what people say Ideas and Logic use rules to solve problems; order or arrange things Visual Understanding see hidden patterns; quickly compare groups of letters, numbers, pictures, or other things Math add, subtract, multiply, or divide

# INFORMATION TECHNOLOGY

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Network and Computer Systems Administrators	Network Systems	Install, configure, and maintain an organization's local area network (LAN), wide area network (WAN), data communications network, operating systems, and physical and virtual servers. Perform system monitoring and verify the integrity and availability of hardware, network, and server resources and systems. Review system and application logs and verify completion of scheduled jobs, including system backups. Analyze network and server resource consumption and control user access. Install and upgrade software and maintain software licenses. May assist in network modeling, analysis, planning, and coordination between network and data communications hardware and software.	4	IRC	129	\$78,300
Computer Network Architects	Network Systems	Design and implement computer and information networks, such as local area networks (LAN), wide area networks (WAN), intranets, extranets, and other data communications networks. Perform network modeling, analysis, and planning, including analysis of capacity needs for network infrastructures. May also design network and computer security measures. May research and recommend network and data communications hardware and software.	4	ICE	41	\$99,510
Computer Occupations	**	-	4	-	130	\$90,960

\*\* This includes several computer related occupations that are grouped together

- Unable to provide details since it is not a specific occupation

#### **Data Sources:**

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### INFORMATION TECHNOLOGY

### Knowledge

**Engineering and Technology** 

computers and electronics;

product and service

**Arts and Humanities** 

English language

customer service:

Communications

telecommunications

**Engineering and Technology** 

computers and electronics;

product and service

Communications

English language

Math and Science

arithmetic, algebra,

statistics

geometry, calculus, or

telecommunications

Arts and Humanities

development

administrative services

development

**Business** 

Skills

Abilities

#### Web platform development software

Django; Microsoft ASP.NET

#### Data base user interface and query software

Blackboard software; Transact-SQL

**Network monitoring software** Remote monitoring software; Wireshark

### Basic Skills

reading work related information; thinking about the pros and cons of different ways to solve a problem

#### **People and Technology Systems**

figuring out how a system should work and how changes in the future will affect it; thinking about the pros and cons of different options and picking the best one

#### Problem Solving

noticing a problem and figuring out the best way to solve it

#### Verbal

read and understand what is written; communicate by speaking

#### **Ideas and Logic**

notice when problems happen; order or arrange things

#### Math

add, subtract, multiply, or divide; choose the right type of math to solve a problem

### **software** Google Angular; Spring Framework

Web platform development

Instant messaging software Blink

**Network monitoring software** Symantec Intruder Alert; Wireshark

#### **Basic Skills**

thinking about the pros and cons of different ways to solve a problem; listening to others, not interrupting, and asking good questions

#### Problem Solving

noticing a problem and figuring out the best way to solve it

#### **People and Technology Systems**

thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it

#### Verbal

listen and understand what people say; read and understand what is written

#### Ideas and Logic

order or arrange things; use rules to solve problems

#### Math

choose the right type of math to solve a problem

### **Career Cluster Map**

The P2C Career Cluster Maps provide an overview of regional high-demand occupations associated with various job zones (i.e., levels of education and training). The purpose of these maps is to assist educators and students in developing awareness of entry and exit points within a particular career field. In using this information, educators and students can quickly gain a sense of potential high-value career opportunities and the level of education and training needed to prepare for these professions. This can promote the alignment of education practices with regional careers and assist students in making informed career decisions that take into account regional labor market demands.

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
*	*	<b>Computer User Support</b> <b>Specialists</b> Annual Openings = 243 Median Wage = \$46,680	Information Security Analysts Annual Openings = 144 Median Wage = \$119,990	*
*	*	*	<b>Computer Network Support Specialists</b> Annual Openings = 139 Median Wage = \$60,530	*
*	*	*	<b>Computer Systems Analysts</b> Annual Openings = 139 Median Wage = \$77,680	*
*	*	*	<b>Computer Occupations</b> Annual Openings = 130 Median Wage = \$90,960	*
*	*	*	Network and Computer Systems Administrators Annual Openings = 129 Median Wage = \$78,300	*

\* There are no occupations in this Job Zone for this cluster.



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# Law, Public Safety, Corrections & Security

When there's something strange in your neighborhood, who are you going to call? Typically someone from this career cluster will respond to your request for help. These workers protect us from crime and other sources of harm like natural disasters. They help us receive fair treatment and get justice when we've been wronged. Some workers also set up and implement security plans.

If you pay attention to the evening news or watch television dramas, you're aware of the most obvious occupations in this

industry: police officers, fire fighters, and lawyers. Less apparent careers include hazardous material removal workers, ski patrol workers, and postsecondary educators who teach criminal justice, psychology, and anthropology classes. Occupations with faster than average growth in New Mexico include security guards, paralegals, and emergency medical technicians.

> Work environments and educational backgrounds differ in these careers. Although some workers stay in offices most of the day, others work outdoors. For certain jobs, workers have to pass medical exams and demonstrate strength and agility. Some careers may be dangerous and require shift work, sometimes with long hours. Many of these jobs can be found at all levels of government, in law offices, and security businesses.

# **Core Skills**

- Negotiation
- Persuasion
- Speaking
- Social Perceptiveness
- Active Listening

- Writing
- Service Orientation
- **Critical Thinking**
- **Judgement & Decision Making**
- Instructing

# **Career Pathways and Occupations**

#### Security & Protective Services Pathway

**Education, Training & Library** 

Criminal Justice & Law Enforcement Teachers, Postsecondary

#### **Protective Service**

Security Guards; Other First-Line Supervisors of Protective Service Workers; Private Detectives & Investigators; Crossing Guards; Animal **Control Workers** 

#### **Correction Services Pathway**

**Community & Social Service** 

Child, Family & School Social Workers; Probation Officers & Correctional Treatment Specialists; Other Social Workers

**Education, Training & Library** Criminal Justice & Law Enforcement Teachers, Postsecondary; Psychology Teachers, Postsecondary

#### **Emergency & Fire Management Services Pathway**

Occupatior

Uccupation

**Construction & Extraction** Hazardous Materials Removal Workers

### **Healthcare Practitioners & Technicians Emergency Medical Technicians & Paramedics**

#### **Protective Service**

Security Guards; Correctional Officers & Jailers; First-Line Supervisors of Police & Detectives; Other Protective Service Workers; First-Line Supervisors of Correctional Officers

**Office & Administrative Support** Police, Fire & Ambulance Drivers

**Protective Service** 

Correctional Officers & Jailers; Firefighters; First-Line Supervisors of Firefighting & Prevention Workers; Fire Inspectors & Investigators

#### Law Enforcement Services Pathway

Education, Training & Library Criminal Justice & Law Enforcement Teachers, Postsecondary

Life, Physical & Social Science Forensic Science Technicians

#### **Protective Service**

Police & Sheriff's Patrol Officers: Correctional Officers & Jailers: First-Line Supervisors of Police & Detectives; Detectives & Criminal Investigators; Other Protective Service Workers; Transportation Security Screeners; Animal Control Workers; Bailiffs

#### **Legal Services Pathway**

**Education, Training & Library** Law Teachers, Postsecondary

#### Legal

Lawyers; Paralegals & Legal Assistants; Other Legal Support Workers; Title Examiners, Abstractors & Searchers

**Office & Administrative Support** Legal Secretaries

Occupation



# Top 10 High-Value Careers in New Mexico

For a complete list of careers within this cluster and to review occupations specific to your workforce region, visit careerpathways-nm.com.

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Police and Sheriff's Patrol Officers	Law Enforcement Services	Maintain order and protect life and property by enforcing local, tribal, state, or federal laws and ordinances. Perform a combination of the following duties: patrol a specific area; direct traffic; issue traffic summonses; investigate accidents; apprehend and arrest suspects, or serve legal processes of courts. Includes police officers working at educational institutions.	3	ERS	369	\$59,580
Lawyers	Legal Services	Represent clients in criminal and civil litigation and other legal proceedings, draw up legal documents, or manage or advise clients on legal transactions. May specialize in a single area or may practice broadly in many areas of law.	5	EI	244	\$90,000
Paralegals and Legal Assistants	Legal Services	Assist lawyers by investigating facts, preparing legal documents, or researching legal precedent. Conduct research to support a legal proceeding, to formulate a defense, or to initiate legal action.	3	CIE	189	\$46,770
Firefighters	Emergency and Fire Management Services	Control and extinguish fires or respond to emergency situations where life, property, or the environment is at risk. Duties may include fire prevention, emergency medical service, hazardous material response, search and rescue, and disaster assistance.	3	RSE	187	\$36,750



Technology	Knowledge	Skills	Abilities
Data base user interface and query software Database software; Microsoft Access Presentation software Microsoft PowerPoint Graphics or photo imaging software Computer aided composite drawing software; SmugMug Flickr	Safety and Government law and government; public safety and security Arts and Humanities English language Math and Science psychology; geography Business customer service	Basic Skills listening to others, not interrupting, and asking good questions; talking to others Social understanding people's reactions; changing what is done based on other people's actions Problem Solving noticing a problem and figuring out the best way to solve it	Verbal listen and understand what people say; communicate by speaking Ideas and Logic notice when problems happen; make general rules or come up with answers from lots of detailed information Visual Understanding see hidden patterns; quickly know what you are looking at Physical Strength use your lower back and stomach
Data base user interface and query software LexisNexis CaseMap; Microsoft Access Presentation software IDEA TrialPro; Microsoft PowerPoint Document management software Adobe Systems Adobe Acrobat; Microsoft Office SharePoint Server MOSS	Safety and Government law and government Arts and Humanities English language Business customer service; management Engineering and Technology computers and electronics	Basic Skills listening to others, not interrupting, and asking good questions; talking to others Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	Verbal communicate by speaking; listen and understand what people say Ideas and Logic make general rules or come up with answers from lots of detailed information; use rules to solve problems Attention pay attention to something without being distracted
Document management software Adobe Systems Adobe Acrobat; Document management system software Word processing software Google Docs; Microsoft Word Information retrieval or search software LexisNexis; Thomson CompuMark SAEGIS	Arts and Humanities English language Business administrative services; customer service Safety and Government law and government Engineering and Technology computers and electronics	Basic Skills reading work related information; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it	Verbal read and understand what is written; communicate by speaking Ideas and Logic notice when problems happen; make general rules or come up with answers from lots of detailed information
Data base user interface and query software Fire incident reporting systems; Microsoft Access Presentation software Microsoft PowerPoint Electronic mail software Email software; Microsoft Outlook	Safety and Government public safety and security; law and government Business customer service; management Education and Training teaching and course design Engineering and Technology building and construction	Basic Skills thinking about the pros and cons of different ways to solve a problem; figuring out how to use new ideas or things Problem Solving noticing a problem and figuring out the best way to solve it Social changing what is done based on other people's actions; looking for ways to help people	Endurance exercise for a long time without getting out of breath Verbal listen and understand what people say; communicate by speaking Physical Strength lift, push, pull, or carry; exercise for a long time without your muscles getting tired Hand and Finger Use keep your arm or hand steady



High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Detectives and Criminal Investigators	Law Enforcement Services	Conduct investigations related to suspected violations of federal, state, or local laws to prevent or solve crimes.	3	EIC	105	\$77,480
Public Safety Telecommunicators	Emergency and Fire Management Services	Operate telephone, radio, or other communication systems to receive and communicate requests for emergency assistance at 9-1-1 public safety answering points and emergency operations centers. Take information from the public and other sources regarding crimes, threats, disturbances, acts of terrorism, fires, medical emergencies, and other public safety matters. May coordinate and provide information to law enforcement and emergency response personnel. May access sensitive databases and other information sources as needed. May provide additional instructions to callers based on knowledge of and certification in law enforcement, fire, or emergency medical procedures.	2	CRE	80	\$37,180
First-Line Supervisors of Firefighting and Prevention Workers	Emergency and Fire Management Services	Directly supervise and coordinate activities of workers engaged in firefighting and fire prevention and control.	3	ERS	60	\$60,500

Technology	Knowledge	Skills	Abilities
Graphics or photo imaging software Adobe Systems Adobe Photoshop; Graphics software Presentation software Microsoft PowerPoint Data base user interface and query software Microsoft Access; Structured query language SQL	Safety and Government law and government; public safety and security Arts and Humanities English language Business customer service; administrative services Math and Science psychology	Basic Skills listening to others, not interrupting, and asking good questions; talking to others Problem Solving noticing a problem and figuring out the best way to solve it Social understanding people's reactions; changing what is done based on other people's actions	Verbal listen and understand what people says communicate by speaking Ideas and Logic make general rules or come up with answers from lots of detailed information; notice when problems happen Visual Understanding see hidden patterns; quickly know what you are looking at Attention do two or more things at the same time
<b>Office suite software</b> Corel WordPerfect Office Suite;	Safety and Government public safety and security; law and	<b>Basic Skills</b> listening to others, not interrupting, and asking good questions; talking	Verbal communicate by speaking; listen and understand what people say Attention

Microsoft Office software

Presentation software

Microsoft PowerPoint

System NLETS

#### Data base user interface and guery software

Microsoft Access; National Law Enforcement Telecommunications government **Arts and Humanities** English language Communications telecommunications; multimedia

**Business** customer service and asking good questions; talking to others

#### Social

understanding people's reactions; changing what is done based on other people's actions

#### **Problem Solving**

noticing a problem and figuring out the best way to solve it

#### Attention

pay attention to something without being distracted; do two or more things at the same time

#### Ideas and Logic

notice when problems happen; order or arrange things

#### **Visual Understanding**

quickly compare groups of letters, numbers, pictures, or other things

#### Data base user interface and query software

Fire incident reporting systems; **Microsoft Access** 

#### **Presentation software**

Microsoft PowerPoint

Analytical or scientific software BehavePlus; Plume modeling software

#### Safety and Government

public safety and security; law and government

### **Business**

customer service; management **Education and Training** 

teaching and course design **Engineering and Technology** 

building and construction

#### **Basic Skills**

listening to others, not interrupting, and asking good questions; thinking about the pros and cons of different ways to solve a problem

#### **Problem Solving**

noticing a problem and figuring out the best way to solve it

#### Social

understanding people's reactions; changing what is done based on other people's actions

#### Verbal

communicate by speaking; listen and understand what people say

#### Ideas and Logic

notice when problems happen; make general rules or come up with answers from lots of detailed information

#### Attention

pay attention to something without being distracted; do two or more things at the same time

#### Hand and Finger Use

hold or move items with your hands



High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Probation Officers and Correctional Treatment Specialists	Correction Services	Provide social services to assist in rehabilitation of law offenders in custody or on probation or parole. Make recommendations for actions involving formulation of rehabilitation plan and treatment of offender, including conditional release and education and employment stipulations.	4	SEC	56	\$47,530
Title Examiners, Abstractors, and Searchers	Legal Services	Search real estate records, examine titles, or summarize pertinent legal or insurance documents or details for a variety of purposes. May compile lists of mortgages, contracts, and other instruments pertaining to titles by searching public and private records for law firms, real estate agencies, or title insurance companies.	2	CER	47	\$39,670
First-Line Supervisors of Police and Detectives	Law Enforcement Services	Directly supervise and coordinate activities of members of police force.	3	ESC	43	\$77,680

#### **Data Sources:**

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- Additional information on occupations within this cluster can be found at engage.pathway2careers.com

	— LAW, PUBLI	C SAFETY, CORREC	TIONS & SECURITY
Technology	Knowledge	Skills	Abilities
Electronic mail software Email software; Microsoft Outlook Presentation software Microsoft PowerPoint Office suite software Corel WordPerfect Office Suite; Microsoft Office software	Safety and Government law and government; public safety and security Arts and Humanities English language Math and Science psychology; sociology and anthropology Health therapy and counseling	Basic Skills listening to others, not interrupting, and asking good questions; talking to others Problem Solving noticing a problem and figuring out the best way to solve it Social understanding people's reactions; bringing people together to solve differences	<b>Verbal</b> communicate by speaking; read and understand what is written <b>Ideas and Logic</b> notice when problems happen; use rules to solve problems
Data base user interface and query software Data Trace Title IQ; Microsoft Access Presentation software Microsoft PowerPoint Document management software Adobe Systems Adobe Acrobat; File management software	Arts and Humanities English language Safety and Government law and government Business administrative services; customer service Engineering and Technology computers and electronics	Basic Skills reading work related information; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it	Verbal communicate by speaking; listen and understand what people say Ideas and Logic use rules to solve problems; make general rules or come up with answers from lots of detailed information
Data base user interface and query software Microsoft Access; National Crime Information Center (NCIC) database Presentation software Microsoft PowerPoint Graphics or photo imaging software Computer aided composite drawing software; DesignWare 3D EyeWitness	Safety and Government law and government; public safety and security Arts and Humanities English language Business management; customer service Math and Science psychology	Basic Skills listening to others, not interrupting, and asking good questions; keeping track of how well people and/or groups are doing in order to make improvements Problem Solving noticing a problem and figuring out the best way to solve it Social changing what is done based on other people's actions; understanding people's reactions	Verbal communicate by speaking; listen and understand what people say Ideas and Logic notice when problems happen; make general rules or come up with answers from lots of detailed information Attention pay attention to something without being distracted; do two or more things at the same time Hearing and Speech speak clearly

### **Career Cluster Map**

The P2C Career Cluster Maps provide an overview of regional high-demand occupations associated with various job zones (i.e., levels of education and training). The purpose of these maps is to assist educators and students in developing awareness of entry and exit points within a particular career field. In using this information, educators and students can quickly gain a sense of potential high-value career opportunities and the level of education and training needed to prepare for these professions. This can promote the alignment of education practices with regional careers and assist students in making informed career decisions that take into account regional labor market demands.

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
*	<b>Security Guards</b> Annual Openings = 1092 Median Wage = \$28,910	<b>Police and Sheriff's Patrol Officers</b> Annual Openings = 369 Median Wage = \$59,580	<b>Probation Officers and</b> <b>Correctional Treatment</b> <b>Specialists</b> Annual Openings = 56 Median Wage = \$47,530	<b>Lawyers</b> Annual Openings = 244 Median Wage = \$90,000
*	<b>Correctional Officers and Jailers</b> Annual Openings = 281 Median Wage = \$38,040	<b>Paralegals and Legal</b> <b>Assistants</b> Annual Openings = 189 Median Wage = \$46,770	<b>Forensic Science</b> <b>Technicians</b> Annual Openings = 31 Median Wage = \$47,870	<b>Judges, Magistrate Judges, and Magistrates</b> Annual Openings = 18 Median Wage = \$95,310
*	Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers Annual Openings = 243 Median Wage = \$22,800	<b>Firefighters</b> Annual Openings = 187 Median Wage = \$36,750	*	Administrative Law Judges, Adjudicators, and Hearing Officers Annual Openings = 7 Median Wage = \$60,550
*	<b>Public Safety</b> <b>Telecommunicators</b> Annual Openings = 80 Median Wage = \$37,180	Detectives and Criminal Investigators Annual Openings = 105 Median Wage = \$77,480	*	<b>Arbitrators, Mediators, and Conciliators</b> Annual Openings = *** Median Wage = \$90,000
*	<b>Crossing Guards and Flaggers</b> Annual Openings = 56 Median Wage = \$28,380	<b>Legal Secretaries and</b> <b>Administrative Assistants</b> Annual Openings = 87 Median Wage = \$41,620	*	*

\* There are no occupations in this Job Zone for this cluster.



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# Manufacturing

Although manufacturing often brings to mind huge, wide open factory floors, it also includes small businesses. Manufacturing businesses can range from in-home bakeries to large corporations like Intel. One thing most manufacturing businesses have in common: increasing use of technology. From roastmasters who use programmable coffee roasting machines to industrial engineering technicians who operate 3-D printers that make metal parts, manufacturing is quite different than it was even a decade ago.

Manufacturing workers change materials, substances, or components into new products. Manufactured goods include or are made from chemicals, computers and electronics, fabricated metal products, food, machinery, plastics and rubber products, or transportation equipment. While businesses still hire workers for traditional mass production of simple products, manufacturing jobs increasingly use technologies that enable workers to customize, shorten production time, and create lighter weight, more durable products.

> Manufacturing includes occupations with a variety of education and experience backgrounds, but job numbers have been decreasing in occupations that require the least amount of education. New Mexico's growth careers in manufacturing often involve installing, maintaining, and repairing increasingly technical equipment. Industries most likely to hire this cluster's workers include Computer & Electronic Product, chemical and nonmetal, and food and beverage manufacturers.

# Core Skills

- Repairing
- Equipment Maintenance
- Operation & Control
- Equipment Selection
- Troubleshooting

- Operation Monitoring
- Quality Control Analysis
- Installation
- Technology Design
- Monitoring

Production

Production

**Equipment Assemblers** 

# **Career Pathways and Occupations**

#### Manufacturing Production Process Development Pathway

#### Life, Physical & Social Science

Chemical Technicians; Environmental Science & Protection Technicians , Including Health; Other Life, Physical & Social Science Technicians

#### **Quality Assurance Pathway**

Architecture & Engineering Environmental Engineering Technicians

#### Healthcare Practitioners & Technicians Occupational Health & Safety Specialists

#### Maintenance, Installation & Repair Pathway

#### **Architecture & Engineering**

Civil Engineering Technicians; Electrical & Electronic Engineering Technicians; Industrial Engineering Technicians; Mechanical Engineering Technicians; Other Engineering Technicians, Except Drafters

#### Arts, Design, Entertainment, Sports & Media Interior Designers

#### Computer & Mathematical

Software Developers, Applications; Computer User Support Specialists

#### **Construction & Extraction**

Other Construction & Related Workers; Hazardous Materials Removal Workers; Fence Erectors; Elevator Installers & Repairers

### Life, Physical & Social Science

**Biological Technicians** 

#### Office & Administrative Support

Production, Planning & Expediting Clerks

#### Installation, Maintenance & Repair

Maintenance & Repair Workers, General; First-Line Supervisors of Mechanics, Installers & Repairers; Industrial Machinery Mechanics; Telecommunications Equipment Installers & Repairers, Except Line Installers; Helpers – Installation, Maintenance & Repair Workers; Computer Automated Teller & Office Machine Repairers; Maintenance Workers, Machinery; Other Installation, Maintenance & Repair Workers; Mobile Heavy Equipment Mechanics, Except Engines; Telecommunications Line Installers & Repairers; Security & Fire Alarm Systems Installers; Electrical & Electronics Repairers; Outdoor Power Equipment & Other Small Engine Mechanics; Home Appliance Repairers; Millwrights; Rail Car Repairers; Locksmiths & Safe Repairers; Other Precision Instrument & Equipment Repairers

**Chemical Equipment Operators & Tenders; Electromechanical** 

Inspectors, Testers, Sorters, Samplers & Weighers

#### **Computer & Mathematical**

Inspectors, Testers, Sorters, Samplers & Weighers; Electromechanical Equipment Assemblers; Engine & Other Machine Assemblers; Jewelers & Precious Stone Metal Workers; Medical Appliance Technicians



# **Career Pathways and Occupations**

#### **Production Pathway**

#### **Architecture & Engineering**

Industrial Engineering Technicians; Mechanical Engineering Technicians

**Business & Financial Operations** Purchasing Agents, Except Wholesale, Retail, & Farm Products

**Construction & Extraction** Sheet Metal Workers; Hazardous Materials Removal Workers

Installation, Maintenance & Repair Millwrights; Recreational Vehicle Service Technicians

Management Industrial Production Managers

#### Office & Administrative Support

Weighers, Measurers, Checkers & Samplers, Recordkeeping

#### Production

Team Assemblers; First-Line Supervisors of Production & Operating Workers; Inspectors, Testers, Sorters, Samplers, & Weighers; Helpers -Production Workers; Packaging & Filling Machine Operators & Tenders; Machinists; Welders, Cutters, Solderers & Brazers; Bakers; Mixing & Blending Machine Setters, Operators & Tenders; Computer-Controlled Machine Tool Operators; Metal & Plastic; Woodworking Machine Setters, Operators & Tenders, Except Sawing; Other Production Workers; Paper Goods Machine Setters, Operators & Tenders; Separating, Filtering, Clarifying, Precipitating & Still Machine Setters, Operators & Tenders; Coating, Painting & Spraying Machine Setters, Operators & Tenders; Structural Metal Fabricators & Fitters; Tool & Die Makers; Chemical Equipment Operators & Tenders; Painters, Transportation Equipment; Photographic Process Workers & Processing Machine Operators; Electromechanical Equipment Assemblers; Adhesive Bonding Machine Operators & Tenders; Forging Machine Setters, Operators & Tenders, Metal & Plastic; Engine & Other Machine Assemblers; Plating & Coating Machine Setters, Operators, & Tenders, Metal & Plastic; Computer Numerically Controlled Machine Tool Programmers, Metal & Plastic; Jewelers & Precious Stone & Metal Workers; Molders, Shapers & Casters, Except Metal & Plastic; Painting, Coating, & Decorating Workers; Fiberglass Laminators & Fabricators; Tool Grinders, Filers & Sharpeners; Crushing, Grinding, & Polishing Machine Setters, Operators, & Tenders; Ophthalmic Laboratory Technicians

Transportation & Material Moving Machine Feeders & Offbearers



### **DID YOU KNOW?**

**On the job, a Machinist would:** Calculate dimensions or tolerances, using instruments, such as micrometers or vernier calipers.

Machine parts to specifications, using machine tools, such as lathes, milling machines, shapers, or grinders.

Measure, examine, or test completed units to check for defects and ensure conformance to specifications, using precision instruments, such as micrometers.

Source: P2C Career Explorer, engage.pathway2careers.com




### MANUFACTURING

**Top 10 High-Value Careers in New Mexico** For a complete list of careers within this cluster and to review occupations specific to your workforce region, visit <u>careerpathways-nm.com</u>.

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Maintenance and Repair Workers, General	Maintenance, Installation and Repair	Perform work involving the skills of two or more maintenance or craft occupations to keep machines, mechanical equipment, or the structure of a building in repair. Duties may involve pipe fitting; HVAC maintenance; insulating; welding; machining; carpentry; repairing electrical or mechanical equipment; installing, aligning, and balancing new equipment; and repairing buildings, floors, or stairs.	3	RCI	1,003	\$36,930
Industrial Machinery Mechanics	Maintenance, Installation and Repair	Repair, install, adjust, or maintain industrial production and processing machinery or refinery and pipeline distribution systems. May also install, dismantle, or move machinery and heavy equipment according to plans.	3	RIC	333	\$48,420
First-Line Supervisors of Mechanics, Installers, and Repairers	Maintenance, Installation and Repair	Directly supervise and coordinate the activities of mechanics, installers, and repairers. May also advise customers on recommended services. Excludes team or work leaders.	3	ECR	283	\$62,260
Welders, Cutters, Solderers, and Brazers	Production	Use hand-welding, flame-cutting, hand-soldering, or brazing equipment to weld or join metal components or to fill holes, indentations, or seams of fabricated metal products.	2	RCI	250	\$48,600



Technology	Knowledge	Skills	Abilities
Operating system software Apple macOS; Linux Video creation and editing software Loom; YouTube Computer aided design CAD software Autodesk AutoCAD; Dassault Systemes CATIA	Engineering and Technology mechanical; building and construction Arts and Humanities English language Math and Science arithmetic, algebra, geometry, calculus, or statistics Manufactured or Agricultural Goods manufacture and distribution of products	<b>Basic Skills</b> thinking about the pros and cons of different ways to solve a problem; figuring out how to use new ideas or things <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it	Hand and Finger Use hold or move items with your hands; keep your arm or hand steady Verbal communicate by speaking; listen and understand what people say Ideas and Logic order or arrange things; notice when problems happen Visual Understanding see hidden patterns
Spreadsheet software Microsoft Excel Presentation software Microsoft PowerPoint Industrial control software KEYENCE PLC Ladder Logic; Supervisory control and data acquisition SCADA software	Engineering and Technology mechanical; product and service development Arts and Humanities English language Manufactured or Agricultural Goods manufacture and distribution of products Math and Science arithmetic, algebra, geometry, calculus, or statistics	Basic Skills thinking about the pros and cons of different ways to solve a problem; figuring out how to use new ideas or things Technical figuring out what is causing equipment, machines, wiring, or computer programs to not work; planning and doing the basic maintenance on equipment Problem Solving noticing a problem and figuring out the best way to solve it	Hand and Finger Use hold or move items with your hands; put together small parts with your fingers Controlled Movement quickly change the controls of a machine, car, truck or boat; use your arms and/or legs together while sitting, standing, or lying down Ideas and Logic notice when problems happen; order or arrange things Hearing and Speech tell the difference between sounds
Enterprise resource planning ERP software Microsoft Dynamics; SAP software Presentation software Microsoft PowerPoint Data base user interface and query software Microsoft Access; Yardi software	Business management; customer service Engineering and Technology mechanical Arts and Humanities English language Math and Science arithmetic, algebra, geometry, calculus, or statistics	Basic Skills keeping track of how well people and/ or groups are doing in order to make improvements; talking to others People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it Resource Management selecting and managing the best workers for a job; managing your time and the time of other people	Verbal communicate by speaking; listen and understand what people say Ideas and Logic make general rules or come up with answers from lots of detailed information; use rules to solve problems Hearing and Speech recognize spoken words; speak clearly Visual Understanding see hidden patterns
Electronic mail software IBM Notes; Microsoft Outlook Analytical or scientific software Scientific Software Group Filter Drain FD; Value Analysis Data base user interface and query software Oracle Database; Recordkeeping software	Manufactured or Agricultural Goods manufacture and distribution of products Engineering and Technology mechanical	Basic Skills keeping track of how well people and/ or groups are doing in order to make improvements Problem Solving noticing a problem and figuring out the best way to solve it	Hand and Finger Use keep your arm or hand steady; put together small parts with your fingers Ideas and Logic notice when problems happen; use rules to solve problems

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
First-Line Supervisors of Production and Operating Workers	Production	Directly supervise and coordinate the activities of production and operating workers, such as inspectors, precision workers, machine setters and operators, assemblers, fabricators, and plant and system operators. Excludes team or work leaders.	3	ERC	247	\$59,860
Security and Fire Alarm Systems Installers	Maintenance, Installation and Repair	Install, program, maintain, and repair security and fire alarm wiring and equipment. Ensure that work is in accordance with relevant codes.	3	RC	113	\$38,490
Electrical and Electronic Engineering Technologists and Technicians	Manufacturing Production Process Development	Apply electrical and electronic theory and related knowledge, usually under the direction of engineering staff, to design, build, repair, adjust, and modify electrical components, circuitry, controls, and machinery for subsequent evaluation and use by engineering staff in making engineering design decisions.	3	RIC	91	\$73,170
Machinists	Production	Set up and operate a variety of machine tools to produce precision parts and instruments out of metal. Includes precision instrument makers who fabricate, modify, or repair mechanical instruments. May also fabricate and modify parts to make or repair machine tools or maintain industrial machines, applying knowledge of mechanics, mathematics, metal properties, layout, and machining procedures.	3	RCI	84	\$47,740

			MANUFACTURING
Technology	Knowledge	Skills	Abilities
Enterprise resource planning ERP software Oracle JD Edwards EnterpriseOne; SAP software Presentation software Microsoft PowerPoint Electronic mail software Email software; Microsoft Outlook	Manufactured or Agricultural Goods manufacture and distribution of products Business management; human resources (HR) Arts and Humanities English language Engineering and Technology computers and electronics	Basic Skills listening to others, not interrupting, and asking good questions; talking to others People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it Social changing what is done based on other people's actions; understanding people's reactions	<b>Verbal</b> communicate by speaking; listen and understand what people say <b>Ideas and Logic</b> notice when problems happen; use rules to solve problems
Operating system software Microsoft operating system; Microsoft Windows Presentation software Microsoft PowerPoint Spreadsheet software Microsoft Excel	Safety and Government public safety and security Engineering and Technology computers and electronics; building and construction Business customer service Communications telecommunications	Basic Skills talking to others; thinking about the pros and cons of different ways to solve a problem Problem Solving noticing a problem and figuring out the best way to solve it	Hand and Finger Use hold or move items with your hands; keep your arm or hand steady Verbal listen and understand what people say; communicate by speaking Ideas and Logic notice when problems happen; order or arrange things
Analytical or scientific software The MathWorks MATLAB; Wolfram Research Mathematica Presentation software Microsoft PowerPoint Computer aided design CAD software Autodesk Revit; Bentley MicroStation	Engineering and Technology computers and electronics; product and service development Arts and Humanities English language Math and Science arithmetic, algebra, geometry, calculus, or statistics; physics Business customer service	Basic Skills thinking about the pros and cons of different ways to solve a problem; reading work related information <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it <b>People and Technology Systems</b> thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	Verbal read and understand what is written; listen and understand what people say Ideas and Logic notice when problems happen; use rules to solve problems Hand and Finger Use put together small parts with your fingers; keep your arm or hand steady Visual Understanding quickly compare groups of letters, numbers, pictures, or other things
Computer aided manufacturing CAM			Hand and Finger Use

### software

Dassault Systemes SolidWorks; Mastercam computer-aided design and manufacturing software

**Presentation software** 

Microsoft PowerPoint

Computer aided design CAD software

Autodesk AutoCAD; Dassault Systemes CATIA

#### **Math and Science**

arithmetic, algebra, geometry, calculus, or statistics **Engineering and Technology** mechanical; design **Manufactured or Agricultural** Goods manufacture and distribution of products

#### **Basic Skills**

or groups are doing in order to make improvements; thinking about the pros and cons of different ways to solve a problem Problem Solving

noticing a problem and figuring out the best way to solve it

keeping track of how well people and/

hold or move items with your hands; keep your arm or hand steady

#### **Controlled Movement**

quickly change the controls of a machine, car, truck or boat; change when and how fast you move based on how something else is moving

#### Ideas and Logic

notice when problems happen; use rules to solve problems



MANUFACTURING

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Medical Equipment Repairers	Maintenance, Installation and Repair	Test, adjust, or repair biomedical or electromedical equipment.	3	RIC	56	\$39,360
Coating, Painting, & Spraying Machine Setters, Operators, & Tenders	Production	Set up, operate, or tend spraying or rolling machines to coat or paint any of a wide variety of products, including glassware, cloth, ceramics, metal, plastic, paper, or wood, with lacquer, silver, copper, rubber, varnish, glaze, enamel, oil, or rust-proofing materials. Includes painters of transportation vehicles such as painters in auto body repair facilities.	2	RCI	51	\$37,710

#### **Data Sources:**

- The list of High-Value Occupations have been derived by analysis of the data from the U.S. Department of Labor, Employment and Training Administration (USDOL/ETA) and New Mexico Workforce Connection.
- Detailed descriptors such as Technology, Knowledge, Skills, Abilities have been taken from mynextmove.org which is powered by 0\*NET
- Additional information on occupations within this cluster can be found at engage.pathway2careers.com

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Technology	Knowledge	Skills	Abilities
<b>Spreadsheet software</b> Microsoft Excel <b>Video conferencing software</b> FaceTime <b>Medical software</b> Medical equipment diagnostic software	Engineering and Technology mechanical; computers and electronics Business customer service Arts and Humanities English language Math and Science arithmetic, algebra, geometry, calculus, or statistics	Basic Skills reading work related information; thinking about the pros and cons of different ways to solve a problem Technical repairing machines or systems using the right tools; planning and doing the basic maintenance on equipment Problem Solving noticing a problem and figuring out the best way to solve it	Hand and Finger Use put together small parts with your fingers; hold or move items with your hands Ideas and Logic notice when problems happen; use rules to solve problems Verbal read and understand what is written; listen and understand what people say
Spreadsheet software Microsoft Excel Inventory management software Inventory control software; Inventory management systems Electronic mail software Microsoft Outlook	neet software       Basic         t Excel       Engineering and Technology         y management software       mechanical         y control software; Inventory       Arts and Humanities         nent systems       English language         ic mail software       notic		Hand and Finger Use keep your arm or hand steady; hold or move items with your hands Controlled Movement quickly change the controls of a machine, car, truck or boat; use your arms and/or legs together while sitting, standing, or lying down

MANUFACTURING

### **Career Cluster Map**

The P2C Career Cluster Maps provide an overview of regional high-demand occupations associated with various job zones (i.e., levels of education and training). The purpose of these maps is to assist educators and students in developing awareness of entry and exit points within a particular career field. In using this information, educators and students can quickly gain a sense of potential high-value career opportunities and the level of education and training needed to prepare for these professions. This can promote the alignment of education practices with regional careers and assist students in making informed career decisions that take into account regional labor market demands.

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
<b>Sewing Machine Operators</b> Annual Openings = 31 Median Wage = \$29,570	Welders, Cutters, Solderers, and Brazers Annual Openings = 250 Median Wage = \$48,600	Maintenance and Repair Workers, General Annual Openings = 1003 Median Wage = \$36,930	*	*
<b>Meat, Poultry, and Fish Cutters and Trimmers</b> Annual Openings = 6 Median Wage = \$28,790	<b>Helpers—Production Workers</b> Annual Openings = 195 Median Wage = \$29,400	<b>Industrial Machinery</b> <b>Mechanics</b> Annual Openings = 333 Median Wage = \$48,420	*	*
<b>Grinding and Polishing</b> <b>Workers, Hand</b> Annual Openings = *** Median Wage = \$23,200	<b>Inspectors, Testers, Sorters, Samplers, and Weighers</b> Annual Openings = 171 Median Wage = \$45,850	First-Line Supervisors of Mechanics, Installers, and Repairers Annual Openings = 283 Median Wage = \$62,260	*	*
<b>Painting, Coating, and Decorating Workers</b> Annual Openings = *** Median Wage = \$30,470	<b>Semiconductor Processing</b> <b>Technicians</b> Annual Openings = 160 Median Wage = \$38,100	First-Line Supervisors of Production and Operating Workers Annual Openings = 247 Median Wage = \$59,860	*	*
*	<b>Food Batchmakers</b> Annual Openings = 159 Median Wage = \$29,900	<b>Security and Fire Alarm</b> <b>Systems Installers</b> Annual Openings = 113 Median Wage = \$38,490	*	*

\* There are no occupations in this Job Zone for this cluster.

**Data Sources** Aligned with O\*NET job zone classification system



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# Marketing

Who helps form your first opinion of a business or other organization? First impressions count, so employees from hotel desk clerks to cashiers to property managers serve as important marketers. Marketing, Sales and Service also includes jobs that have a more obvious connection with marketing such as marketing managers and merchandise displayers and window trimmers. The main goal of employees in this cluster is to help their organization reach its objectives.

Among New Mexico's occupations with expected above average growth are customer service representatives, market research analysts, and meeting, convention, and event planners. Retail salespersons top the list of the highest number of new jobs. While many workers in the Marketing, Sales and Service cluster need a high school education, careers that require an Associate or Bachelor's degree tend to have higher wages. Workplaces that are most likely to offer marketing positions include grocery stores, warehouse clubs, gasoline stations with convenience stores, home centers, and wholesale goods businesses.

> The work environment for these occupations varies by job responsibilities. While some workers have desk jobs and regular weekday schedules, others will need to be on their feet most of the time. Work in marketing and advertising can involve long work hours with pressure to be creative within short time frames to meet deadlines. People who work in this industry need strong persuasive and customer service skills.

## **Core Skills**

- Persuasion
- Negotiation
- Service Orientation
- Management of Financial Resources
- Social Perceptiveness

- Speaking
- **Mathematics**
- Active Listening
- Management of Material Resources

Retail Salespersons; Sales Reps, Wholesale & Manufacturing,

Except Technical & Scientific Products; Counter & Rental Clerks;

Coordination

Sales & Sales Related

Parking Lot Attendants

**Transportation & Material Moving** 

Telemarketers

### **Career Pathways and Occupations**

# Occupation

#### **Business & Financial Operations**

**Merchandising Pathway** 

Purchasing Agents, Except Wholesale, Retail & Farm Products; Wholesale & Retail Buyers, Except Farm Products

#### **Office & Administrative Support**

Customer Service Reps; Office Clerks, General; Order Clerks; Procurement Clerks

#### **Marketing Research Pathway**

**Business & Financial Operations** Market Research Analysts & Marketing Specialists

**Education, Training & Library** Business Teachers, Postsecondary

#### Management Marketing Managers

#### **Professional Sales Pathway**

#### Arts, Design, Entertainment, Sports & Media

Merchandise Displayers & Window Trimmers; Interior Designers; **Floral Designers** 

#### **Business & Financial Operations**

Wholesale & Retail Buyers, Except Farm Products; Meeting, Convention & Event Planners; Appraisers & Assessors of Real Estate

#### Management

Marketing Managers; Property, Real Estate & Community Association Managers; Lodging Managers

#### **Office & Administrative Support**

Stock Clerks & Order Fillers; Reservation & Transportation Ticket Agents & Travel Clerks

#### Sales & Related

Retail Salespersons; First-Line Supervisors of Retail Sales Workers; Sales Reps, Wholesale & Manufacturing, Except Technical & Scientifc Products; Other Sales Reps, Services; First-Line Supervisors of Non-Retail Sales Workers; Counter & Rental Clerks; Real Estate Brokers; Sales Reps, Wholesale & Manufacturing, Technical & Scientific Products; Real Estate Brokers; Parts Salespersons; Telemarketers; Other Sales & Related Workers; Demonstrators & Product Promoters Sales Engineers; Door-to-Door Sales Workers; News & Street Vendors & Related Workers

**Transportation & Material Moving Drivers/Sales Workers** 

# **Career Pathways and Occupations**

#### **Marketing Communications Pathway**

#### Management

Sales Managers; Account Executives; Advertising Managers; Contract Administrators; Promotions Managers; Public Relations Managers

#### **Marketing Management Pathway**

#### Management

Inventory Manager/Analyst; Logistics Manager; Forecasting Manager

Occupation



### **DID YOU KNOW?**

**On the job, a Marketing Manager would:** Identify, develop, or evaluate marketing strategy, based on knowledge of establishment objectives, market characteristics, and cost and markup factors.

Formulate, direct, or coordinate marketing activities or policies to promote products or services, working with advertising or promotion managers.

Evaluate the financial aspects of product development, such as budgets, expenditures, research and development appropriations, or return-on-investment and profit-loss projections.

Source: P2C Career Explorer, engage.pathway2careers.com



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### MARKETING

**Top 10 High-Value Careers in New Mexico** For a complete list of careers within this cluster and to review occupations specific to your workforce region, visit <u>careerpathways-nm.com</u>.

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	Professional Sales	Sell goods for wholesalers or manufacturers to businesses or groups of individuals. Work requires substantial knowledge of items sold.	4	CE	392	\$48,210
Market Research Analysts and Marketing Specialists	Marketing Research	Research conditions in local, regional, national, or online markets. Gather information to determine potential sales of a product or service, or plan a marketing or advertising campaign. May gather information on competitors, prices, sales, and methods of marketing and distribution. May employ search marketing tactics, analyze web metrics, and develop recommendations to increase search engine ranking and visibility to target markets.	4	IRC	261	\$48,880
Real Estate Sales Agents	Professional Sales	Rent, buy, or sell property for clients. Perform duties such as study property listings, interview prospective clients, accompany clients to property site, discuss conditions of sale, and draw up real estate contracts. Includes agents who represent buyer.	3	EC	237	\$46,230
Property, Real Estate, and Community Association Managers	Marketing Management	Plan, direct, or coordinate the selling, buying, leasing, or governance activities of commercial, industrial, or residential real estate properties. Includes managers of homeowner and condominium associations, rented or leased housing units, buildings, or land (including rights-of-way).	4	EC	126	\$48,430

MARKETING

### 8::

#### Technology

#### Knowledge

#### Enterprise resource planning ERP software Microsoft Dynamics; SAP software Data base user interface and

**query software** Blackboard software; Yardi software

#### **Customer relationship** management CRM software Salesforce software; Soffront CRM Portal

#### Analytical or scientific software

IBM SPSS Statistics; The MathWorks MATLAB Data base user interface and query software Airtable; Amazon Redshift Information retrieval or search software LexisNexis; Verispan Patient Parameters

#### Data base user interface and query software

Xactware Xactimate; Yardi software

#### Word processing software Google Docs; Microsoft Word

Financial analysis software RealData Comparative Lease Analysis; Wheatworks Real Estate Calculator Suite

#### Data base user interface and query software Propertyware; Yardi software Word processing software Google Docs; Microsoft Word Accounting software

Intuit QuickBooks; Sage 50 Accounting

#### Business sales and marketing; customer

service

Arts and Humanities

English language Math and Science

arithmetic, algebra, geometry, calculus, or statistics

#### Transportation

movement of people or goods by air, rail, sea, or road

#### Arts and Humanities

English language **Business** 

customer service; sales and marketing

#### Math and Science

arithmetic, algebra, geometry, calculus, or statistics; sociology and anthropology **Communications** multimedia

#### mannoula

#### Business

customer service; sales and marketing Arts and Humanities English language Safety and Government law and government

**Communications** multimedia

#### **Business**

customer service; management Arts and Humanities English language Safety and Government law and government; public safety and security Math and Science arithmetic, algebra, geometry, calculus, or statistics

#### Basic Skills

Skills

listening to others, not interrupting, and asking good questions; talking to others **Social** 

bringing people together to solve

### differences; talking people into changing their minds or their behavior

**Problem Solving** noticing a problem and figuring out the best

way to solve it

#### Basic Skills

reading work related information; thinking about the pros and cons of different ways to solve a problem

#### **Problem Solving**

noticing a problem and figuring out the best way to solve it

#### People and Technology Systems

thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it

#### **Basic Skills**

listening to others, not interrupting, and asking good questions; talking to others **Social** 

### bringing people together to solve

differences; changing what is done based on other people's actions

#### **Problem Solving**

noticing a problem and figuring out the best way to solve it

#### Basic Skills

talking to others; reading work related information

#### Social

changing what is done based on other people's actions; bringing people together to solve differences

#### **Problem Solving**

noticing a problem and figuring out the best way to solve it

#### Verbal

Abilities

communicate by speaking; listen and understand what people say **Ideas and Logic** 

come up with lots of ideas; group things in different ways

#### Verbal

communicate by speaking; communicate by writing

#### Ideas and Logic

make general rules or come up with answers from lots of detailed information; come up with lots of ideas

#### Math

choose the right type of math to solve a problem; add, subtract, multiply, or divide

#### Verbal

communicate by speaking; listen and understand what people say Ideas and Logic

use rules to solve problems; group things in different ways

#### Verbal

communicate by speaking; listen and understand what people say Ideas and Logic

#### make general rules or come up with answers from lots of

detailed information; notice when problems happen

#### Math

add, subtract, multiply, or divide; choose the right type of math to solve a problem

Ê	MARKETING						
	High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
	Public Relations Specialists	Marketing Communications	Promote or create an intended public image for individuals, groups, or organizations. May write or select material for release to various communications media. May specialize in using social media.	4	EAS	117	\$55,730
	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	Professional Sales	Sell goods for wholesalers or manufacturers where technical or scientific knowledge is required in such areas as biology, engineering, chemistry, and electronics, normally obtained from at least 2 years of postsecondary education.	4	EC	109	\$63,920
	Sales Managers	Marketing Management	Plan, direct, or coordinate the actual distribution or movement of a product or service to the customer. Coordinate sales distribution by establishing sales territories, quotas, and goals and establish training programs for sales representatives. Analyze sales statistics gathered by staff to determine sales potential and inventory requirements and monitor the preferences of customers.	4	EC	104	\$93,300
	Advertising Sales Agents	Professional Sales	Sell or solicit advertising space, time, or media in publications, signage, TV, radio, or Internet establishments or public spaces.	4	ECA	49	\$38,390

Technology	Knowledge	Skills	Abili

Web page creation and editing software Facebook; WordPress Graphics or photo imaging software Adobe Systems Adobe Creative Cloud software; JamBoard Web platform development software Cascading style sheets CSS; Drupal

Enterprise resource planning ERP software Microsoft Dynamics; SAP software Video conferencing software LogMeln GoToMeeting; Zoom Customer relationship management CRM software Salesforce software; Sybase iAnywhere Sales Anywhere

Enterprise resource planning ERP software Microsoft Dynamics; SAP software Data base user interface and query software Airtable; Yardi software Customer relationship management CRM software Eden Sales Manager; Salesforce software

Communications multimedia Arts and Humanities English language Business customer service; management Engineering and Technology computers and electronics

#### Business

customer service; sales and marketing

Arts and Humanities English language

Math and Science arithmetic, algebra, geometry, calculus, or statistics

#### Manufactured or Agricultural Goods

manufacture and distribution of products

#### Business

sales and marketing; customer service Arts and Humanities English language Education and Training teaching and course design

Communications multimedia

#### Business

sales and marketing; customer service Arts and Humanities

English language Communications multimedia Math and Science

#### riatil and Science

arithmetic, algebra, geometry, calculus, or statistics

#### **Basic Skills**

listening to others, not interrupting, and asking good questions; talking to others **Social** 

understanding people's reactions; changing what is done based on other people's actions

#### Problem Solving

noticing a problem and figuring out the best way to solve it

#### Basic Skills

talking to others; listening to others, not interrupting, and asking good questions **Social** 

talking people into changing their minds or their behavior; bringing people together to solve differences

#### Problem Solving

noticing a problem and figuring out the best way to solve it

#### **Basic Skills**

listening to others, not interrupting, and asking good questions; talking to others **Social** 

talking people into changing their minds or their behavior; bringing people together to solve differences

#### Problem Solving

**Basic Skills** 

Social

people

**Problem Solving** 

way to solve it

noticing a problem and figuring out the best way to solve it

talking to others; listening to others, not

interrupting, and asking good questions

talking people into changing their minds

or their behavior; looking for ways to help

noticing a problem and figuring out the best

#### Verbal

Verbal

ities

Ideas and Logic

communicate by speaking; listen and understand what people say Ideas and Logic

listen and understand what people

say; communicate by speaking

notice when problems happen;

use rules to solve problems

use rules to solve problems; come up with lots of ideas

#### Memory

remember words, numbers, pictures, or steps

#### Verbal

communicate by speaking; listen and understand what people say

#### Ideas and Logic

use rules to solve problems; come up with lots of ideas

#### Math

add, subtract, multiply, or divide; choose the right type of math to solve a problem

#### Memory

remember words, numbers, pictures, or steps

#### Verbal

communicate by speaking; listen and understand what people say **Ideas and Logic** 

come up with lots of ideas; create new and original ideas

MARKETING, SALES & SERVICE • 159



Email software; Microsoft Outlook

MARKETING

MARKETING

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Marketing Managers	Marketing Management	Plan, direct, or coordinate marketing policies and programs, such as determining the demand for products and services offered by a firm and its competitors, and identify potential customers. Develop pricing strategies with the goal of maximizing the firm's profits or share of the market while ensuring the firm's customers are satisfied. Oversee product development or monitor trends that indicate the need for new products and services.	4	EC	39	\$99,070
Real Estate Brokers	Professional Sales	Operate real estate office, or work for commercial real estate firm, overseeing real estate transactions. Other duties usually include selling real estate or renting properties and arranging loans.	4	EC	13	\$47,040

#### **Data Sources:**

- The list of High-Value Occupations have been derived by analysis of the data from the U.S. Department of Labor, Employment and Training Administration (USDOL/ETA) and New Mexico Workforce Connection.
- Detailed descriptors such as Technology, Knowledge, Skills, Abilities have been taken from mynextmove.org which is powered by 0\*NET
- Additional information on occupations within this cluster can be found at engage.pathway2careers.com

			— MARKETING
Technology	Knowledge	Skills	Abilities
Data base user interface a query software Airtable; Amazon Redshift Web platform developmen software Oracle JavaServer Pages J Ruby on Rails Customer relationship management CRM softwar QAD Marketing Automation Salesforce software	Business sales and marketing; management Arts and Humanities English language JSP; Communications multimedia Engineering and Technology re computers and electronics	Basic Skillsfiguring out how to use new ideas or things;listening to others, not interrupting, andasking good questionsProblem Solvingnoticing a problem and figuring out the bestway to solve itPeople and Technology Systemsthinking about the pros and cons of differentoptions and picking the best one; measuringhow well a system is working and how toimprove it	Verbal communicate by speaking; listen and understand what people say Ideas and Logic use rules to solve problems; come up with lots of ideas Math add, subtract, multiply, or divide; choose the right type of math to solve a problem
Data base user interface a query software Microsoft Access; Yardi sof Presentation software Microsoft PowerPoint Internet browser software Microsoft Internet Explored browser software	sales and marketing; customer service Arts and Humanities English language Safety and Government e law and government	Basic Skills talking to others; listening to others, not interrupting, and asking good questions Social bringing people together to solve differences; talking people into changing their minds or their behavior Problem Solving noticing a problem and figuring out the best way to solve it	<b>Verbal</b> communicate by speaking; listen and understand what people say <b>Ideas and Logic</b> use rules to solve problems; notice when problems happen

MARKETING

### **Career Cluster Map**

The P2C Career Cluster Maps provide an overview of regional high-demand occupations associated with various job zones (i.e., levels of education and training). The purpose of these maps is to assist educators and students in developing awareness of entry and exit points within a particular career field. In using this information, educators and students can quickly gain a sense of potential high-value career opportunities and the level of education and training needed to prepare for these professions. This can promote the alignment of education practices with regional careers and assist students in making informed career decisions that take into account regional labor market demands.

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
*	<b>Cashiers</b> Annual Openings = 3886 Median Wage = \$23,360	<b>Real Estate Sales Agents</b> Annual Openings = 237 Median Wage = \$46,230	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products Annual Openings = 392 Median Wage = \$48,210	*
*	<b>Retail Salespersons</b> Annual Openings = 3099 Median Wage = \$28,270	<b>Merchandise Displayers and Window Trimmers</b> Annual Openings = 80 Median Wage = \$29,550	Market Research Analysts and Marketing Specialists Annual Openings = 261 Median Wage = \$48,880	*
*	<b>First-Line Supervisors of Retail Sales Workers</b> Annual Openings = 957 Median Wage = \$38,280	*	<b>Property, Real Estate, and</b> <b>Community Association Managers</b> Annual Openings = 126 Median Wage = \$48,430	*
*	Sales Representatives of Services, Except Advertising, Insurance, Financial Services, and Travel Annual Openings = 551 Median Wage = \$50,850	*	<b>Public Relations Specialists</b> Annual Openings = 117 Median Wage = \$55,730	*
*	<b>Parts Salespersons</b> Annual Openings = 260 Median Wage = \$29,880	*	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products Annual Openings = 109 Median Wage = \$63,920	*

\* There are no occupations in this Job Zone for this cluster.

**Data Sources** Aligned with O\*NET job zone classification system



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# Science, Technology, Engineering & Mathematics

The Science, Technology, Engineering, and Mathematics STEM career cluster includes as many as 184 occupations. What do they have in common? Workers in these careers use scientific, technological, engineering, and or mathematical processes to do research and solve problems. The problems they approach are as different as growing enough food, reducing our reliance on fossil fuels, developing medicines to treat mental illness, and creating computers that enhance our lives. Their career focus can be as small as a nanoparticle or as large as the universe.

Work settings vary with the topic of STEM research. While some jobs take place in front of a computer or in a laboratory, others require people to work in outdoor environments. Schedules also depend on the focus of STEM workers' research. Some individuals have very regular hours, but others' schedules depend upon availability of the subject they analyze. Employers who are likely to hire STEM qualified workers include engineering companies; the federal, state, and local government; scientific research companies; colleges and universities; and medical device manufacturers.

> More than any of the other clusters, many STEM careers require at least an associates degree or higher. Most occupations require a bachelor's degree, and some workers need master's or doctoral level credentials for a significant number of jobs. Typical educational backgrounds for entry into five occupations that are projected to have the most new jobs in New Mexico include:

> > Market Research Analysts and Marketing Specialists - Bachelor's degree

Applications Software Developers -Bachelor's degree

Computer User Support Specialists -Some college, no degree

Health Specialties Teachers - Doctoral or professional degree

Civil Engineers - Bachelor's degree

### **Core Skills**

- Science
- Programming
- Mathematics
- Technology Design
- Operations Analysis

- Systems Analysis
- Systems Evaluation
- Writing
- Reading Comprehension
- Complex Problem Solving

### **Career Pathways and Occupations**

#### Engineering & Technology Pathway

#### Architecture & Engineering

Civil Engineers; Industrial Engineers; Mechanical Engineers; Electrical Engineers; Electronics Engineers, Except Computer; Surveying & Mapping Technicians; Electrical & Electronic Engineering Technicians; Architectural & Civil Drafter; Other Engineers; Environmental Engineers; Computer Hardware Engineers; Industrial Engineering Technicians; Other Engineering Technicians, Except Drafters; Chemical Engineers; Electrical & Electronic Drafters; Aerospace Engineers; Biomedical Engineers; Health & Safety Engineers, Except Mining Safety Engineers & Inspectors Arts, Design, Entertainment, Sports & Media Technical Writers

Business & Financial Operations Cost Estimators

**Education, Training & Library** Other Education, Training & Library Workers; Engineering Teachers, Postsecondary

Management Architectural & Engineering Managers

#### **Science & Math Pathway**

Architecture & Engineering Cartographers & Photogrammetrists

#### Business & Financial Operations

Market Research Analysts & Marketing Specialists

**Community & Social Service** Other Community & Social Service Specialists

#### Management

Software Developers, Applications; Computer User Support Specialists; Computer Programmers; Other Computer Occupations; Statisticians

#### **Education, Training & Library**

Health Specialties Teachers, Postsecondary; Other Education, Training & Library Workers; Vocational Education Teachers, Postsecondary; Biological Science Teachers, Postsecondary; Mathematical Science Teachers, Postsecondary; History Teachers, Postsecondary; Philosophy & Religion Teachers, Postsecondary; Chemistry Teachers, Postsecondary; Engineering Teachers, Postsecondary; Political Science Teachers, Postsecondary; Curators; Physics Teachers, Postsecondary; Economics Teachers, Postsecondary

#### Healthcare Practitioners & Technicians Family & General Practitioners; Dietitians & Nutritionists

Life, Physical & Social Science

Environmental Scientists & Specialists, Including Health; Medical Scientists, Except Epidemiologists; Chemists; Chemical Technicians; Biological Technicians; Other Physical Scientists; Social Science Research Assistants; Other Life Scientists; Other Biological Scientists; Other Social Scientists & Related Workers; Agricultural & Food Science Technicians; Geoscientists, Except Hydrologists & Geographers; Other Life, Physical & Social Science Technicians; Zoologists & Wildlife Biologists; Biochemists & Biophysicists; Microbiologists; Survey Researchers; Conservation Scientists; Material Scientists; Economists

#### Management

Architectural & Engineering Managers; Natural Science Managers

Occupatior

**Top 10 High-Value Careers in New Mexico** For a complete list of careers within this cluster and to review occupations specific to your workforce region, visit <u>careerpathways-nm.com</u>.

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Environmental Scientists and Specialists, Including Health	Science and Mathematics	Conduct research or perform investigation for the purpose of identifying, abating, or eliminating sources of pollutants or hazards that affect either the environment or public health. Using knowledge of various scientific disciplines, may collect, synthesize, study, report, and recommend action based on data derived from measurements or observations of air, food, soil, water, and other sources.	4	IRC	155	\$68,140
Electrical Engineers	Engineering and Technology	Research, design, develop, test, or supervise the manufacturing and installation of electrical equipment, components, or systems for commercial, industrial, military, or scientific use.	4	IR	115	\$120,390
Architectural and Engineering Managers	Engineering and Technology	Plan, direct, or coordinate activities in such fields as architecture and engineering or research and development in these fields.	5	ERI	109	\$191,420



Technology	Knowledge	Skills	Abilities
Analytical or scientific software Laboratory information management system LIMS; Wolfel IMMI Presentation software Microsoft PowerPoint Data base user interface and query software Microsoft Access; Structured query language SQL	Arts and Humanities English language Math and Science biology; chemistry Business customer service; administrative services Safety and Government law and government	Basic Skills listening to others, not interrupting, and asking good questions; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it Social changing what is done based on other people's actions; teaching people how to do something	Verbal listen and understand what people say; read and understand what is written Ideas and Logic notice when problems happen; use rules to solve problems Math choose the right type of math to solve a problem; add, subtract, multiply, or divide
Analytical or scientific software Minitab; The MathWorks MATLAB Word processing software Microsoft OneNote; Microsoft Word Computer aided design CAD software Autodesk AutoCAD Civil 3D; Autodesk Revit	Engineering and Technology product and service development; computers and electronics Arts and Humanities English language Math and Science arithmetic, algebra, geometry, calculus, or statistics; physics Manufactured or Agricultural Goods manufacture and distribution of products	Basic Skills writing things for co-workers or customers; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems figuring out how a system should work and how changes in the future will affect it; measuring how well a system is working and how to improve it	Verbal communicate by writing; read and understand what is written Ideas and Logic make general rules or come up with answers from lots of detailed information; notice when problems happen Math choose the right type of math to solve a problem; add, subtract, multiply, or divide Attention pay attention to something without being distracted
Data base management system software Amazon DynamoDB; Apache Hive Presentation software Microsoft PowerPoint Computer aided design CAD software	Engineering and Technology design; product and service development Math and Science arithmetic, algebra, geometry, calculus, or statistics; physics Arts and Humanities English language Dusineer	Basic Skills reading work related information; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different	Verbal read and understand what is written; communicate by speaking Ideas and Logic make general rules or come up with answers from lots of detailed information; notice when problems happen Math

in the future will affect it

**Business** 

management

Autodesk AutoCAD Civil 3D;

Autodesk Revit

options and picking the best one; figuring out choose the right type of math to solve how a system should work and how changes a problem; add, subtract, multiply, or divide

# SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Mechanical Engineers	Engineering and Technology	Perform engineering duties in planning and designing tools, engines, machines, and other mechanically functioning equipment. Oversee installation, operation, maintenance, and repair of equipment such as centralized heat, gas, water, and steam systems.	4	IRC	81	\$120,390
Computer and Information Research Scientists	Science and Mathematics	Conduct research into fundamental computer and information science as theorists, designers, or inventors. Develop solutions to problems in the field of computer hardware and software.	5	IRC	77	\$120,860
Electronics Engineers, Except Computer	Engineering and Technology	Research, design, develop, or test electronic components and systems for commercial, industrial, military, or scientific use employing knowledge of electronic theory and materials properties. Design electronic circuits and components for use in fields such as telecommunications, aerospace guidance and propulsion control, acoustics, or instruments and controls.	4	IR	55	\$120,390
Aerospace Engineers	Engineering and Technology	Perform engineering duties in designing, constructing, and testing aircraft, missiles, and spacecraft. May conduct basic and applied research to evaluate adaptability of materials and equipment to aircraft design and manufacture. May recommend improvements in testing equipment and techniques.	4	IR	48	\$120,380

### SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

A

Technology	Knowledge	Skills	Abilities
Analytical or scientific software Minitab; The MathWorks MATLAB Instant messaging software Blink Computer aided design CAD software Autodesk AutoCAD Civil 3D; Autodesk Revit	Engineering and Technology product and service development; design Math and Science arithmetic, algebra, geometry, calculus, or statistics; physics Arts and Humanities English language Manufactured or Agricultural Goods manufacture and distribution of products	Basic Skills listening to others, not interrupting, and asking good questions; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; measuring how well a system is working and how to improve it	Mathchoose the right type of math to solvea problem; add, subtract, multiply, ordivideIdeas and Logicorder or arrange things; make generalrules or come up with answers fromlots of detailed informationVerballisten and understand what people say;read and understand what is writtenVisual Understandingsee hidden patterns
Development environment software Apache Kafka; Oracle Java 2 Platform Enterprise Edition J2EE Presentation software Microsoft PowerPoint Analytical or scientific software SAS; The MathWorks MATLAB	Engineering and Technology computers and electronics; product and service development Math and Science arithmetic, algebra, geometry, calculus, or statistics Arts and Humanities English language Business management	Basic Skills thinking about the pros and cons of different ways to solve a problem; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	Verbal communicate by speaking; listen and understand what people say Ideas and Logic make general rules or come up with answers from lots of detailed information; use rules to solve problems Math choose the right type of math to solve a problem; add, subtract, multiply, or divide
Computer aided design CAD software Autodesk AutoCAD; Dassault Systemes SolidWorks Presentation software Microsoft PowerPoint Development environment software C; National Instruments LabVIEW	Engineering and Technology product and service development; computers and electronics Math and Science arithmetic, algebra, geometry, calculus, or statistics; physics Arts and Humanities English language Education and Training teaching and course design	Basic Skills reading work related information; thinking about the pros and cons of different ways to solve a problem Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems figuring out how a system should work and how changes in the future will affect it; thinking about the pros and cons of different options and picking the best one	Verbal communicate by speaking; listen and understand what people say Ideas and Logic make general rules or come up with answers from lots of detailed information; order or arrange things Math choose the right type of math to solve a problem; add, subtract, multiply, or divide Visual Understanding see hidden patterns
Analytical or scientific software The MathWorks MATLAB; Wolfram Research Mathematica Presentation software Microsoft PowerPoint Development environment software C; Microsoft Visual Studio	Engineering and Technology product and service development; design Math and Science arithmetic, algebra, geometry, calculus, or statistics; physics Arts and Humanities English language Manufactured or Agricultural Goods manufacture and distribution of products	Basic Skills thinking about the pros and cons of different ways to solve a problem; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; measuring how well a system is working and how to improve it	Verbal read and understand what is written; communicate by speaking Ideas and Logic make general rules or come up with answers from lots of detailed information; notice when problems happen Math choose the right type of math to solve a problem; add, subtract, multiply, or divide

A

### SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Industrial Engineers	Engineering and Technology	Design, develop, test, and evaluate integrated systems for managing industrial production processes, including human work factors, quality control, inventory control, logistics and material flow, cost analysis, and production coordination.	4	ICE	36	\$100,940
Chemists	Science and Mathematics	Conduct qualitative and quantitative chemical analyses or experiments in laboratories for quality or process control or to develop new products or knowledge.	4	IRC	33	\$79,000
Geoscientists, Except Hydrologists and Geographers	Science and Mathematics	Study the composition, structure, and other physical aspects of the Earth. May use geological, physics, and mathematics knowledge in exploration for oil, gas, minerals, or underground water; or in waste disposal, land reclamation, or other environmental problems. May study the Earth's internal composition, atmospheres, and oceans, and its magnetic, electrical, and gravitational forces. Includes mineralogists, paleontologists, stratigraphers, geodesists, and seismologists.	5	IR	31	\$70,660

#### Data Sources:

- The list of High-Value Occupations have been derived by analysis of the data from the U.S. Department of Labor, Employment and Training Administration (USDOL/ETA) and New Mexico Workforce Connection.
- Detailed descriptors such as Technology, Knowledge, Skills, Abilities have been taken from mynextmove.org which is powered by O\*NET
- Additional information on occupations within this cluster can be found at engage.pathway2careers.com

### SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

Technology	Knowledge	Skills	Abilities
Analytical or scientific software Minitab; The MathWorks MATLAB Presentation software Microsoft PowerPoint Computer aided design CAD software Bentley MicroStation; Dassault Systemes SolidWorks	Engineering and Technology product and service development; mechanical Manufactured or Agricultural Goods manufacture and distribution of products Arts and Humanities English language Math and Science arithmetic, algebra, geometry, calculus, or statistics	Basic Skills listening to others, not interrupting, and asking good questions; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems figuring out how a system should work and how changes in the future will affect it; measuring how well a system is working and how to improve it	Verbalcommunicate by speaking; communicate by writingIdeas and Logicmake general rules or come upwith answers from lots of detailedinformation; use rules to solveproblemsMathadd, subtract, multiply, or divide; choose the right type of math to solvea problemAttentionpay attention to something withoutbeing distracted
Data base user interface and query software Microsoft Access; Structured query language SQL Presentation software Apple iWork Keynote; Microsoft PowerPoint Analytical or scientific software Minitab; Waters Empower Chromatography Data Software	Math and Science chemistry; arithmetic, algebra, geometry, calculus, or statistics Arts and Humanities English language Manufactured or Agricultural Goods manufacture and distribution of products Business management	Basic Skills using scientific rules and strategies to solve problems; reading work related information Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	Verbal communicate by speaking; communicate by writing Math choose the right type of math to solve a problem; add, subtract, multiply, or divide Ideas and Logic make general rules or come up with answers from lots of detailed information; use rules to solve problems Visual Understanding

see hidden patterns

#### Verbal

read and understand what is written; communicate by speaking

#### Ideas and Logic

make general rules or come up with answers from lots of detailed information; group things in different ways

#### Math

choose the right type of math to solve a problem; add, subtract, multiply, or divide

#### **Visual Understanding**

see hidden patterns

Mat Analytical or scientific geo

Gemcom Surpac; The MathWorks MATLAB

software

**Presentation software** Microsoft PowerPoint

Map creation software Mapping software; SACLANTCEN

Math and Science geography; arithmetic, algebra, geometry, calculus, or statistics

Arts and Humanities English language

Engineering and Technology computers and electronics; product and service

development **Education and Training** 

teaching and course design

#### **Basic Skills**

reading work related information; talking to others

#### **Problem Solving**

noticing a problem and figuring out the best way to solve it

#### People and Technology Systems

thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it

### SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

### **Career Cluster Map**

The P2C Career Cluster Maps provide an overview of regional high-demand occupations associated with various job zones (i.e., levels of education and training). The purpose of these maps is to assist educators and students in developing awareness of entry and exit points within a particular career field. In using this information, educators and students can quickly gain a sense of potential high-value career opportunities and the level of education and training needed to prepare for these professions. This can promote the alignment of education practices with regional careers and assist students in making informed career decisions that take into account regional labor market demands.

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
*	*	*	<b>Engineers, All Other</b> Annual Openings = 157 Median Wage = \$120,390	<b>Architectural and</b> <b>Engineering Managers</b> Annual Openings = 109 Median Wage = \$191,420
*	*	*	Environmental Scientists and Specialists, Including Health Annual Openings = 155 Median Wage = \$68,140	<b>Computer and Information</b> <b>Research Scientists</b> Annual Openings = 77 Median Wage = \$120,860
*	*	*	<b>Electrical Engineers</b> Annual Openings = 115 Median Wage = \$120,390	Geoscientists, Except Hydrologists and Geographers Annual Openings = 31 Median Wage = \$70,660
*	*	*	<b>Mechanical Engineers</b> Annual Openings = 81 Median Wage = \$120,390	<b>Anthropologists and</b> <b>Archeologists</b> Annual Openings = 26 Median Wage = \$63,430
*	*	*	<b>Electronics Engineers</b> , <b>Except Computer</b> Annual Openings = 55 Median Wage = \$120,390	<b>Biological Scientists, All Other</b> Annual Openings = 21 Median Wage = \$77,560

\* There are no occupations in this Job Zone for this cluster.



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# **Transportation, Distribution & Logistics**

Transportation keeps our economy, people, and products moving. Occupations involved in transporting, distributing, and coordinating the movement of goods range from airline pilots to mechanics to logisticians. Additionally, this cluster includes occupations related to warehouse storage, including jobs like cargo and freight agents; supervisors; and non-emergency dispatchers.

The majority of this career cluster's work takes place on the ground via highways and railroads, but it also includes workers who move people and products over the water and through the air. Work environments vary by occupation. While some truck drivers may work long hours and travel great distances, people who work in warehouses are more likely to work eight hour shifts. Physical strength is necessary for some jobs, while word processing and spreadsheet skills are priorities in other occupations.

> For the Transportation, Distribution and Logistics career cluster, the greatest number of new jobs in New Mexico are projected to include heavy and tractor-trailer truck drivers; freight laborers, stock, and material movers; operating engineers and other construction equipment operators; and heavy diesel mechanics. Many jobs require a high school education, but postsecondary education, usually no higher than a bachelor's degree, is needed for some occupations. Workers may often find jobs in temporary service agencies, long distance freight trucking businesses, new car dealerships, warehouse and storage facilities, and express delivery companies.



# Core Skills

- Repairing
- Equipment Maintenance
- Operation & Control
- Troubleshooting
- Operation Monitoring

- Equipment Selection
- Quality Control Analysis
- Installation
- Management of Material Resources
- Monitoring

## **Career Pathways and Occupations**

Jccupation

Occupation

### Sales & Service Pathway Office & Administrative Support

First-Line Supervisors of Office & Administrative Support Workers; Billing & Posting Clerks; Reservation & Transportation Ticket Agents & Travel Clerks; Cargo & Freight Agents Sales & Related Parts Salespersons

#### Logistics Planning & Management Services Pathway

#### Business & Financial Operations Logisticians

#### Management

Other Managers; Administrative Services Managers; Chief Executives

#### Facility & Mobile Equipment Maintenance Pathway

#### Installation, Maintenance & Repair

Automotive Service Technicians & Mechanics; Bus & Truck Mechanics & Diesel Engine Specialists; Automotive Body & Related Repairers; Aircraft Mechanics & Service Technicians; Other Installation, Maintenance & Repair Workers; Mobile Heavy Equipment Mechanics, Except Engines; Tire Repairers & Changers; Outdoor Power Equipment & Other Small Engine Mechanics; Automotive Glass Installers & Repairers; Avionics Technicians; Motorboat Mechanics & Service Technicians; Rail Car Repairers; Motorcycle Mechanics; Bicycle Repairers; Recreational Vehicle Service Technicians

#### Production

Painters; Transportation Equipment; Engine & Other Machine Assemblers



### **Career Pathways and Occupations**

#### **Transportation Operations Pathway**

#### **Construction Extraction**

Operating Engineers & Other Construction Equipment Operators

Healthcare Practitioners & Technicians Occupational Health & Safety Specialists

Installation, Maintenance & Repair Automotive Service Technicians & Mechanics

Management Transportation, Storage & Distribution Managers

Office & Administrative Support Dispatchers, Except Police, Fire & Ambulance

**Production** Print Binding & Finishing Workers

#### **Transportation & Material Moving**

Manual Laborers & Freight, Stocks & Material Movers; Heavy & Tractor-Trailer Truck Drivers; Light Truck or Delivery Services Drivers; Bus Drivers, School or Special Client; Industrial Truck & Tractor Operators; First-Line Supervisors of Transportation & Material-Moving Machine & Vehicle Operators; First-Line Supervisors of Helpers, Laborers & Material Movers; Bus Drivers, Transit & Intercity; Parking Lot Attendants; Excavating & Loading Machine & Dragline Operators; Crane & Tower Operators; Other Transportation Workers; Commercial Pilots; Railroad Conductors & Yardmasters; Air Traffic Controllers; Ambulance Drivers & Attendants, Except Emergency Medical Technicians; Captains, Mates & Pilots of Water Vessels; Transportation Inspectors

#### Warehousing & Distribution Center Operations Pathway

#### **Office & Administrative Support**

Shipping, Receiving & Traffic Clerks; Production, Planning & Expediting Clerks

#### **Transportation & Material Moving**

Laborers & Freight, Stock & Material Movers, First-Line Supervisors of Transportation & Material-Moving Machine & Vehicle Operators; First-Line Supervisors of Helpers, Laborers & Material Movers, Tank Car, Truck & Ship Loaders

#### Health, Safety & Environmental Management Pathway

#### Engineering

Industrial Safety and Health Engineers

**Uccupation** 

**Uccupation** 

#### Transportation Systems/Infrastructure Planning, Management & Regulation Pathway

#### **Transportation & Material Moving**

Aviation Inspectors, Freight & Cargo Inspectors, Traffic Technicians, Transportation Vehicle, Equipment & Systems Inspectors, Transportation Planners

#### Business & Financial Operations Customs Brokers



### **DID YOU KNOW?**

**On the job, an Automotive Service Technician & Mechanic would:** Inspect vehicles for damage and record findings so that necessary repairs can be made.

Test drive vehicles and test components and systems, using equipment such as infrared engine analyzers, compression gauges, and computerized diagnostic devices.

Test and adjust repaired systems to meet manufacturers' performance specifications.

Source: P2C Career Explorer, engage.pathway2careers.com



### TRANSPORTATION, DISTRIBUTION & LOGISTICS

**Top 10 High-Value Careers in New Mexico** For a complete list of careers within this cluster and to review occupations specific to your workforce region, visit <u>careerpathways-nm.com</u>.

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Heavy and Tractor-Trailer Truck Drivers	Transportation Operations	Drive a tractor-trailer combination or a truck with a capacity of at least 26,001 pounds Gross Vehicle Weight (GVW). May be required to unload truck. Requires commercial drivers' license. Includes tow truck drivers.	2	RC	1,510	\$47,480
Light Truck Drivers	Transportation Operations	Drive a light vehicle, such as a truck or van, with a capacity of less than 26,001 pounds Gross Vehicle Weight (GVW), primarily to pick up merchandise or packages from a distribution center and deliver. May load and unload vehicle.	2	RC	618	\$37,150
Automotive Service Technicians and Mechanics	Facility and Mobile Equipment Maintenance	Diagnose, adjust, repair, or overhaul automotive vehicles.	3	RIC	505	\$37,920



Technology	Knowledge	Skills	Abilities
Word processing software 3M Post-it App; Microsoft Word Data base user interface and query software ddlsoftware.com drivers daily log program DDL; TruckersHelper Route navigation software ALK Technologies PC*Miler; MarcoSoft Quo Vadis	Transportation movement of people or goods by air, rail, sea, or road Safety and Government public safety and security; law and government Business customer service Arts and Humanities English language	<b>Basic Skills</b> keeping track of how well people and/or groups are doing in order to make improvements; reading work related information <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it	Controlled Movement change when and how fast you move based on how something else is moving; quickly change the controls of a machine, car, truck or boat Spatial know where things are around you; imagine how something will look after it is moved around or changed Vision see details that are far away; decide which thing is closer or farther away from you or decide how far away it is from you Attention pay attention to something without being distracted
Spreadsheet software Microsoft Excel Desktop communications software Eko Industrial control software FreightDATA; Vehicle location and tracking software	Arts and Humanities English language Business customer service Transportation movement of people or goods by air, rail, sea, or road	Basic Skills keeping track of how well people and/or groups are doing in order to make improvements; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it	Spatial know where things are around you Controlled Movement use your arms and/or legs together while sitting, standing, or lying down; quickly change the controls of a machine, car, truck or boat Endurance exercise for a long time without getting out of breath Verbal communicate by speaking
Electronic mail software IBM Notes; Microsoft Outlook Video creation and editing software YouTube Facilities management software Alliance Automotive Shop Controller; Snap-On ShopKey	<b>Engineering and Technology</b> mechanical; computers and electronics <b>Business</b> customer service	<ul> <li>Basic Skills</li> <li>thinking about the pros and cons of different ways to solve a problem; keeping track of how well people and/or groups are doing in order to make improvements</li> <li>Problem Solving</li> <li>noticing a problem and figuring out the best way to solve it</li> <li>People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it</li> </ul>	Hand and Finger Use hold or move items with your hands; put together small parts with your fingers Ideas and Logic use rules to solve problems; make general rules or come up with answers from lots of detailed information Attention pay attention to something without being distracted; do two or more things at the same time Visual Understanding quickly compare groups of letters, numbers, pictures, or other things


# TRANSPORTATION, DISTRIBUTION & LOGISTICS

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage	
Bus and Truck Mechanics and Diesel Engine Specialists	Facility and Mobile Equipment Maintenance	Diagnose, adjust, repair, or overhaul buses and trucks, or maintain and repair any type of diesel engines. Includes mechanics working primarily with automobile or marine diesel engines.	3	RC	200	\$47,310	
Billing and Posting Clerks	Sales and Service	Compile, compute, and record billing, accounting, statistical, and other numerical data for billing purposes. Prepare billing invoices for services rendered or for delivery or shipment of goods.	3	CES	191	\$37,010	
Industrial Truck and Tractor Operators	Transportation Operations	Operate industrial trucks or tractors equipped to move materials around a warehouse, storage yard, factory, construction site, or similar location.	2	RC	133	\$38,380	
Logisticians	Logistics Planning and Management Services	Analyze and coordinate the ongoing logistical functions of a firm or organization. Responsible for the entire life cycle of a product, including acquisition, distribution, internal allocation, delivery, and final disposal of resources.	4	EC	102	\$78,630	

# TRANSPORTATION, DISTRIBUTION & LOGISTICS $\blacksquare$

Technology	Knowledge	Skills	Abilities
Computer aided design CAD software Autodesk AutoCAD; Dassault Systemes SolidWorks Facilities management software Computerized maintenance management system software CMMS; Shop management software Analytical or scientific software Cummins INSITE; Engine diagnostic software	Engineering and Technology mechanical; computers and electronics Transportation movement of people or goods by air, rail, sea, or road Education and Training teaching and course design Arts and Humanities English language	<b>Basic Skills</b> thinking about the pros and cons of different ways to solve a problem; talking to others <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it	Hand and Finger Use hold or move items with your hands; keep your arm or hand steady Controlled Movement quickly change the controls of a machine, car, truck or boat; use your arms and/or legs together while sitting, standing, or lying down Ideas and Logic notice when problems happen; use rules to solve problems Hearing and Speech tell the difference between sounds
Accounting software Intuit QuickBooks; Sage 50 Accounting Presentation software Microsoft PowerPoint Medical software Epic Systems; MEDITECH software	Business administrative services; customer service Arts and Humanities English language Math and Science arithmetic, algebra, geometry, calculus, or statistics Engineering and Technology computers and electronics	<b>Basic Skills</b> reading work related information; using math to solve problems <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it	<b>Verbal</b> read and understand what is written; communicate by speaking <b>Math</b> add, subtract, multiply, or divide
Spreadsheet software Microsoft Excel Inventory management software Inventory management systems; RedPrairie DLx Warehouse Materials requirements planning logistics and supply chain software Symphony GOLD; Warehouse management system WMS	<b>Math and Science</b> arithmetic, algebra, geometry, calculus, or statistics <b>Arts and Humanities</b> English language	Basic Skills listening to others, not interrupting, and asking good questions People and Technology Systems thinking about the pros and cons of different options and picking the best one	Controlled Movement quickly change the controls of a machine, car, truck or boat; use your arms and/or legs together while sitting, standing, or lying down Hand and Finger Use hold or move items with your hands; keep your arm or hand steady Spatial imagine how something will look after it is moved around or changed; know where things are around you Attention pay attention to something without being distracted
Enterprise resource planning ERP software Microsoft Dynamics; SAP software Presentation software Microsoft PowerPoint Data base user interface and query software Microsoft SQL Server; Structured query language SQL	Transportation movement of people or goods by air, rail, sea, or road Arts and Humanities English language Business management; customer service Math and Science arithmetic, algebra, geometry, calculus, or statistics	Basic Skills thinking about the pros and cons of different ways to solve a problem; keeping track of how well people and/or groups are doing in order to make improvements Problem Solving noticing a problem and figuring out the best way to solve it People and Technology Systems thinking about the pros and cons of different options and picking the best one; figuring out how a system should work and how changes in the future will affect it	Verbal communicate by speaking; listen and understand what people say Ideas and Logic make general rules or come up with answers from lots of detailed information; notice when problems happen Math add, subtract, multiply, or divide; choose the right type of math to solve a problem



## TRANSPORTATION, DISTRIBUTION & LOGISTICS

High-Value Occupation	Career Pathway	Job Description	Job Zone	Interest Matcher	Annual Openings	Median Wage
Mobile Heavy Equipment Mechanics, Except Engines	Facility and Mobile Equipment Maintenance	Diagnose, adjust, repair, or overhaul mobile mechanical, hydraulic, and pneumatic equipment, such as cranes, bulldozers, graders, and conveyors, used in construction, logging, and mining.	3	RC	98	\$56,240
Automotive Body and Related Repairers	Facility and Mobile Equipment Maintenance	Repair and refinish automotive vehicle bodies and straighten vehicle frames.	2	R	71	\$47,550
Dispatchers, Except Police, Fire, and Ambulance	Logistics Planning and Management Services	Schedule and dispatch workers, work crews, equipment, or service vehicles for conveyance of materials, freight, or passengers, or for normal installation, service, or emergency repairs rendered outside the place of business. Duties may include using radio, telephone, or computer to transmit assignments and compiling statistics and reports on work progress.	2	CRE	67	\$38,960

#### **Data Sources:**

- The list of High-Value Occupations have been derived by analysis of the data from the U.S. Department of Labor, Employment and Training Administration (USDOL/ETA) and New Mexico Workforce Connection.
- Detailed descriptors such as Technology, Knowledge, Skills, Abilities have been taken from mynextmove.org which is powered by O\*NET
- Additional information on occupations within this cluster can be found at engage.pathway2careers.com

# TRANSPORTATION, DISTRIBUTION & LOGISTICS $\blacksquare$

Technology	Knowledge	Skills	Abilities
Spreadsheet software Microsoft Excel Data base user interface and query software Database software; Recordkeeping software Electronic mail software Microsoft Outlook	Engineering and Technology mechanical; computers and electronics Business customer service Math and Science arithmetic, algebra, geometry, calculus, or statistics Safety and Government public safety and security	Basic Skills thinking about the pros and cons of different ways to solve a problem; reading work related information <b>Problem Solving</b> noticing a problem and figuring out the best way to solve it <b>Technical</b> figuring out what is causing equipment, machines, wiring, or computer programs to not work; repairing machines or systems using the right tools	Hand and Finger Use hold or move items with your hands; put together small parts with your fingers Controlled Movement quickly change the controls of a machine, car, truck or boat; use your arms and/or legs together while sitting, standing, or lying down Ideas and Logic notice when problems happen; order or arrange things Visual Understanding quickly compare groups of letters, numbers, pictures, or other things
Operating system software Microsoft Windows Word processing software Microsoft OneNote; Microsoft Word Analytical or scientific software Collision damage estimation software; Swan River Estimiser Pro	Engineering and Technology mechanical Business customer service Manufactured or Agricultural Goods manufacture and distribution of products Math and Science arithmetic, algebra, geometry, calculus, or statistics	Basic Skills keeping track of how well people and/or groups are doing in order to make improvements; listening to others, not interrupting, and asking good questions Problem Solving noticing a problem and figuring out the best way to solve it	Hand and Finger Use keep your arm or hand steady; hold or move items with your hands Ideas and Logic notice when problems happen; order or arrange things
Enterprise resource planning ERP software Microsoft Dynamics; SAP software Presentation software Microsoft PowerPoint Mobile location based services software Global positioning system GPS software; Situation resource tracking software	Business customer service; management Safety and Government public safety and security Arts and Humanities English language Transportation movement of people or goods by air, rail, sea, or road	Basic Skills listening to others, not interrupting, and asking good questions; talking to others Problem Solving noticing a problem and figuring out the best way to solve it Social changing what is done based on other people's actions; looking for ways to help people	Verbal communicate by speaking; listen and understand what people say Ideas and Logic use rules to solve problems; notice when problems happen Attention pay attention to something without being distracted

#### **Career Cluster Map**

The P2C Career Cluster Maps provide an overview of regional high-demand occupations associated with various job zones (i.e., levels of education and training). The purpose of these maps is to assist educators and students in developing awareness of entry and exit points within a particular career field. In using this information, educators and students can quickly gain a sense of potential high-value career opportunities and the level of education and training needed to prepare for these professions. This can promote the alignment of education practices with regional careers and assist students in making informed career decisions that take into account regional labor market demands.

Job Zone 1 High School Diploma or Less	Job Zone 2 High School Diploma	Job Zone 3 Certificate or Associate's Degree	Job Zone 4 Bachelor's Degree	Job Zone 5 Master's or Doctorate Degree
*	<b>Heavy and Tractor-Trailer Truck Drivers</b> Annual Openings = 1510 Median Wage = \$47,480	Automotive Service Technicians and Mechanics Annual Openings = 505 Median Wage = \$37,920	<b>Logisticians</b> Annual Openings = 102 Median Wage = \$78,630	*
*	<b>Laborers and Freight, Stock, and Material Movers, Hand</b> Annual Openings = 1417 Median Wage = \$29,490	Bus and Truck Mechanics and Diesel Engine Specialists Annual Openings = 200 Median Wage = \$47,310	<b>Transportation, Storage, and</b> <b>Distribution Managers</b> Annual Openings = 34 Median Wage = \$81,470	*
*	<b>Light Truck Drivers</b> Annual Openings = 618 Median Wage = \$37,150	<b>Billing and Posting Clerks</b> Annual Openings = 191 Median Wage = \$37,010	<b>Airline Pilots, Copilots, and Flight Engineers</b> Annual Openings = *** Median Wage = \$138,260	*
*	<b>Cleaners of Vehicles and Equipment</b> Annual Openings = 309 Median Wage = \$23,350	<b>Mobile Heavy Equipment</b> <b>Mechanics, Except Engines</b> Annual Openings = 98 Median Wage = \$56,240	*	*
*	<b>Packers and Packagers, Hand</b> Annual Openings = 274 Median Wage = \$24,250	<b>Aircraft Mechanics and</b> <b>Service Technicians</b> Annual Openings = 65 Median Wage = \$76,600	*	*

\* There are no occupations in this Job Zone for this cluster.

**Data Sources** Aligned with O\*NET job zone classification system



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# CHOOSING A CAREER CLUSTER

# How to Choose a Cluster

Self-discovery is vital in the career development process. As students develop and experience the world of work through life experiences, they begin to form preferences about occupations. One way students can identify their preferences is by taking valid and reliable career assessments. Pathway2Careers (P2C) offers a variety of career tools including the Interest Matcher, Values Matcher, and Cluster Matcher that provide students with data that will identify aligned careers. Specifically, the Cluster Matcher will show clusters in which they are most aligned. This is very helpful when students are choosing a CTE program, career academy, or dual enrollment program. P2C's Career Tools and Career Exploration Curriculum support students' deeper exploration as they navigate their education and career planning process.

#### Self-Discovery Career Assessments

*Interests Matcher* - The Interest Matcher helps students understand their interests to find careers that may be exciting or fulfilling. This matcher consists of 60 questions and takes 5 to 10 minutes to complete. Students will complete a questionnaire about work-related tasks and indicate their enjoyment level. Students can access the Interest Matcher as often as needed to update their interests.

*Values Matcher* - The Values Matcher helps students identify careers that fit their personal needs. Students gain insight into their work-related values, needs, and beliefs by conducting a values assessment while comparing them with the careers they research. This assessment will ask students to rank different aspects of work that represent six essential values. This assessment takes 5 minutes and can be retaken at any time.

*Cluster Matcher* - The Cluster Matcher assesses students' knowledge, skills, and abilities related to the national career clusters. Students can view their results with each cluster and learn specific knowledge, skills, and abilities in which they are aligned or need to improve.

#### Access Career Data with Career Tools

*My Career Page* - My Career Page is a landing page for students to save career information and artifacts while using P2C tools. Students can edit their profile, specifying their favorite cluster and graduation year. They can access their saved careers, career journal entries and uploaded artifacts, and career assessment results from their matched interests, values, and clusters. This tool supports students' exploration as they consider a future career.

**Career Library** - The Career Library allows students to search for careers based on career clusters, interests and values, and education zones. The Career Library will enable students to search for occupations and includes career details such as a career video, current labor market data, job zone information, related careers, requirements for the career, career assessment alignment, and how to prepare for the career. *Career Data* - The Career Data tool allows students to explore data pulled from state and regional labor markets. Filters include career clusters, pathways, and high-value occupations. After filtering, students may sort and view data by clusters, occupations, annual openings, median wages, and growth rate.

*Career Comparison* - The Career Comparison tool compares up to three saved careers. The comparisons include career descriptions, annual openings, median wages, education required, work-related tasks, interests, and work values. After making the comparison, students analyze a visual representation (graph) of their alignment with the selected careers.

**ROI Analyzer** - The Return on Investment (ROI) Analyzer tool allows students to evaluate the efficiency of the investment made in their education by the cost of education to how much they will earn from the investment. This tool assesses the ROI for any career requiring public or private postsecondary education. Data includes the estimated educational investment, the estimated time to earn the educational investment, and the estimated time to pay back the educational investment.

#### P2C Career Explorer

**Career Exploration Curriculum** - P2C Career Explorer offers career exploration curriculum designed to be used in grades 6-12 and provides 56 career exploration lessons, 14 STEM lessons, and 49 Financial Literacy lessons. The lessons are developed as cross-curricular in math, ELA, science, social studies, and technology content areas.

*Career Story Playlist* - The Career Story Playlist includes 32 lessons based on individuals working in a particular career. The lessons provide students with a real-world peek into a career and expands their knowledge about the world of work. The playlist includes two lessons from each career cluster and includes diverse education requirements.

# **PATHWAY 2** CAREERS

When education becomes relevant, learners fully engage.



**P2C Career Explorer** takes a unique approach to career exploration. Beyond career tools, the guided curriculum introduces age-appropriate career readiness content available for any subject area. By helping more students discover their strengths, we can see powerful outcomes in their education.

P2C Career Explorer is available to all New Mexico educators at no cost thanks to the Careers2Communities Initiative. Use this powerful resource to unlock career exploration for your students.



#### **P2C Career Tools**

Supporting informed career decisions with valuable career tools such as the Interests Matcher, Values Matcher, Cluster Matcher are all available in P2C.



#### P2C Career Exploration Curriculum

A guided curriculum designed for grades 6-12 offers ageappropriate career readiness content and features multiple subject integrations with dual learning objectives.



#### **P2C Career Story Playlist**

Gain access to mentor-like support with 32 Lessons centered on authentic career narratives of real people represented in all career clusters offering students a lens into diverse career journeys.



#### **My Career Page**

Students can manage their career discovery journey in one centralized location and share the information with educators to spark meaningful conversations about their career pathway decisions.

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**Need Access to P2C?** 

Educators can complete the Get Started form to unlock this powerful resource with your students.



careers2communities.com

# WHO BENEFITS FROM CAREER EXPLORATION?

**Middle School students** can use career exploration tools to start building a foundation for future planning and discovery.

Personal Discovery: Middle school students can begin to explore their interests, values, and skills and start thinking about potential career paths. This can help influence informed decisions regarding high school courses and extracurricular activities as they progress.

**Career Awareness:** By exploring the careers and career clusters, middle school students can gain knowledge about the world of work, helping them develop a sense of responsibility and preparedness for their futures.

**Career Evaluation:** Students can utilize P2C career tools to get a head start on the educational pathways required for their career interests. When students are aware of their own interests, values, and skills and have learned about the world of work, they can begin to evaluate which careers align with their future goals.

**Career Preparation:** This new awareness can inspire middle school students by showing them exciting possibilities ahead and encouraging them to set academic and career goals.

**High School students** can find significant support from career tools as they approach the point of making significant academic and career decisions.

**Career Decision-Making:** High school students are often on the cusp of making important decisions about their future, including college majors and career choices. The Career Tools can provide valuable information to help them make informed decisions.

Academic Planning: Students can use the Career Tools to guide their course selections through high school. For example, if a student discovers a strong alignment in the STEM cluster, they can choose to take science and math courses that prepare them for the STEM field.

**College & Career Prep:** The career tools can help high school students prepare for post-secondary education and the workforce by identifying careers that match their interests, values, and skills. This knowledge can help students make informed choices about college majors or vocational training programs.

Regardless of a student's grade level, it is vital to engage in career exploration early and often! Did you know the earlier a student begins exploring the world of work, the more informed they are when it is time to make those education and career decisions?

Steps you can take now:

- Take career assessments and explore careers matched for you
  - Make an appointment with your school counselor and discuss your education and career goals
  - Seek out CTE programs or career academies in the district that align with your education and career goals



# **HEALTHY SWAPS**

# for supporting your student on their pathway to success

If you are a parent, foster parent, or quardian, your influence can greatly impact your student's chosen career path. Talking about careers and engaging with their career planning process is essential in their career journey. Follow these friendly tips:

#### Impose your own career aspirations:

Let your career explorer discover their own interests and values and find which career paths align with those.

#### **Dismiss their interests:**

Even if they seem unconventional, avoid dismissing your career explorer's interests or passions. Encourage them to pursue what genuinely excites them.



#### **Encourage exploration**

Encourage your career explorer to explore a wide range of career options. Support their curiosity as they learn about different career paths.

#### **Actively Listen:**

Listen to your career explorer's thoughts, interests, and aspirations. Feel free to ask open-ended questions to help them articulate their goals and values.

#### **Place a time Pressure:**

Avoid pressuring your career explorer to make quick decisions. Career planning is a process, and it is okay for them to take the time they need to explore and reflect.

#### **Overload with information:**

It is important to provide guidance, but try to not overwhelm your career explorer with an excessive amount of information. Help them focus on what's most relevant to their goals.













#### **Foster Independence:**

Encourage your career explorer to take ownership of their career planning. Encourage them to use this as an opportunity to make decisions and learn from the process and exploration.

#### **Provide Guidance:**

Offer your career explorer guidance and help interpret the information with them. Share insights and information about the world of work and

#### **Promote Balance:**

Emphasize the importance of a balanced approach to career planning, considering both personal interests, values, and skills and the practicality of different options.

#### **Be Supportive:**

Provide encouragement and celebrate your career explorer successes and offer guidance in times of uncertainty.

#### Stay Informed:

Stay informed about educational and career trends and options, so you can provide up-to-date information to your career explorer. P2C's Career Data Tool is a great way to explore this!

#### **Start Career Exploration Early:**

As soon as your career explorer expresses interest in a career, encourage activities such as interviewing a workforce professional or job

#### Focus solely on income:

While financial considerations are important, try not to place too much emphasis on income potential alone. Prioritize finding a career that aligns with interests and values.

#### **Dismiss alternative paths:**

Be open to alternative pathways, such as vocational training, apprenticeships, or community college if they align with the student's interests and goals.

#### **Be overbearing:**

Avoid micromanaging the process. It is essential for your career explorer to have space to make decisions and learn from the experience.

#### Wait to Start Career Exploration:

The career and post-secondary education planning process can be overwhelming especially if you put it off. Meet with a school counselor early and often to stay on track for success.

# THE EDUCATOR'S ROLE

Educators play an influential role in a student's life and can be a wonderful resource for middle and high school students making informed career decisions. Learn how various educator roles support students in their career planning process.

#### **Middle and High School Counselors**

- Supports meeting American School Counselor Association (ASCA) Student Standards: Mindsets + Behaviors for Student Success
- Supports K-12 College, Career, and Life Readiness Standards
- May be applied to the academic, career, and social/emotional domains
- Provides students with career exploration that contributes to selfawareness so students can make career decisions based on their unique interests, work values, knowledge, skills, and abilities

# Middle and High School Career and Technical Education Teachers (CTE)

- Career research across the sixteen national career clusters allows students to learn about careers related to their program of study and related occupations within a career cluster
- Assists students to make real-world connections from their program of study to the world of work
- Students can research in the Career Data tool to learn about pathways, high value careers, annual openings median wage and job growth rates in their state
- Students can use the Interest, Work Values, and Cluster Matchers to determine which CTE program of study, career academy, or dual enrollment program to choose

Regardless of the grade level you serve or your job within a school, educators play an essential role in helping students reach their highest potential. Steps educators can take now:



Get to know Pathway2Careers! Access our resources and free professional development asynchronous courses in P2C Educate (see Additional Resources section)

Open your educator account and explore. Be sure to take career assessments, investigate the Career Tools, and review the Career Exploration curriculum



Reach out to the P2C professional learning team for customized support for your school or district



#### Middle and High School Exceptional Student Education and Transition Teachers (Special Education)

- Assists students to make real-world connections from the classroom to the world of work
- Supports post-secondary transition planning for education, employment, and independent living
- Exposure and research about careers across career clusters support IEP goals focused on:
  - Self-advocacy and self-determination
  - Vocation and career
  - Transition
  - Community-based instruction

#### **Middle and High School Media Specialists**

 Media Specialists can spark student curiosity by providing relevant information, in accessible multi-media formats, about careers within career clusters and provide contemporary devices students need to research in the Career Library, Career Data, and Career Comparison tools

#### **High School Career/Graduation Coaches**

- Career research across the sixteen national career clusters allows students to learn about careers related to their program of study and related occupations within a career cluster
- Using the Interests, Values, and Cluster Matchers, students will identify careers which are aligned with their assessment results
- Students can track their assessment results and how they align with their bookmarked careers, compare their favorite careers to see which ones are their personal best fit, and upload artifacts that showcase their skills and talents to their customizable profile on My Career Page

# **12 STUDENT BENEFITS**

#### **Guided Career Exploration Curriculum**

#### **Early Self-Discovery**

Students have the opportunity to explore their personal interests, values, and abilities at an early stage. This self-discovery can help them gain a deeper understanding of themselves and what motivates them, which is valuable for future decision-making.

#### **Personal Growth**

The self-discovery process and understanding one's interests, values, and skills contribute to personal growth and development. Students become more self-aware and confident in their choices.

#### **Career Awareness**

The Career Exploration curriculum introduces students to various high-value career opportunities. This exposure broadens their horizons and helps them discover careers they may not have previously considered, allowing for more informed choices.

#### **Career Preparation**

The curriculum helps students understand the education and training required for high-value careers. They learn about the pathways available to reach their career goals, which can inspire them to set academic and vocational targets.

#### **Data-Driven Decision-Making**

Students learn to evaluate regional or state labor market data to identify careers with the greatest opportunities. This data-driven approach equips them with the skills to make informed career decisions based on real-world factors.

#### **Alignment with Core Subjects**

By integrating the curriculum into core subject areas, students can see the relevance of career exploration within their broader education. This makes learning more engaging and practical.

#### **Holistic Approach**

The inclusion of financial literacy and STEM lessons ensures a wellrounded approach to career readiness. Students not only explore career options but also develop essential financial and STEM skills, which are increasingly valuable in today's workforce.

#### Flexibility

The curriculum can be adapted to different grade levels, which caters to diverse student needs and readiness.

#### **Collaborative Learning**

Many lessons are designed to be completed in a classroom with other students. This promotes collaborative learning, discussions, and sharing of ideas, enriching the student's understanding of career-related concepts.

#### **Enhanced Decision-Making Skills**

As students progress through the curriculum, they develop decisionmaking skills, including the ability to make choices based on their interests, values, and skills. These skills are not only essential for career planning but are also valuable life skills.

#### **Portfolio Development**

The "My Career Page" allows students to create a portfolio of their career exploration journey. This can be a valuable resource when applying for colleges, scholarships, or future jobs.

#### **Motivation and Goal-Setting**

Exploring different career options can motivate students to set academic and career goals. It gives them a clearer sense of purpose and direction in their education. Navigating the education and career planning process can be overwhelming for everyone involved. The key is to engage with the process early and often! Steps you can take now:



Meet with your career explorer and school counselor to discuss P2C's career assessment results and career goals

Encourage your career explorer to create short and long-term goals

Engage in ongoing conversations with your career explorer about careers that interest them and jobs they see in their own community



Explore CTE programs or career academies in the district that align with your career explorer's career interests



# CAREER EXPLORATION IN THE CLASSROOM

Quality career exploration tools, resources, and guided curriculum can be a game-changer for students, parents, and educators navigating through the education and career planning journey. When educators access and use the P2C Career Exploration curriculum, students are equipped with the tools and strategies to make informed career decisions and plan for their brightest futures. Its more efficient and easier than ever to help students reach their highest potential through P2C!



Bring career exploration to every student with P2C Career Exploration curriculum. Designed to support students in grades 6-12, educators can guide students through an engaging career discovery journey. Learn more about the innovative approach to career exploration on page 277 in Educator Resources.

# NAVIGATING CAREER PREPARATION



# **Prepare Your Pathway**

With a better understanding of the 16 Career Clusters and determining what Career Cluster you might be interested in pursuing, the following pages will help you understand how to navigate the education and training requirements for each Cluster.

The following pages provide useful information to determine possible education and training required for each Career Cluster. The data presented here can be divide the following sections:

- Common Career Technical Core (CCTC) for each of the 16 Career Clusters. This information defines what students should know and be able to do after completing instruction in a program of study.
- Career Technical Student Organizations can give students real-world experience and exposure to a variety of careers.
- Recommended Programs of Study provided by the New Mexico Public Education Department outline available CTE programs students can pursue.
- Postsecondary Degrees, Programs and Colleges outline the available degrees and postsecondary institutions that support degree obtainment.
- Available Workforce Certifications for each Career Cluster.



#### High school gets you ready for college and career

#### Common Career Technical Core for Agriculture, Food & Natural Resources Career Cluster:

1. Use vocabulary, symbols and formulas common to architecture and construction.

2. Use architecture and construction skills to create and manage a project.

3. Comply with regulations and applicable codes to establish and manage a legal and safe workplace.

4. Evaluate the nature and scope of the Architecture & Construction Career Clusters and the role of architecture and construction in society and the economy.

5. Describe the roles, responsibilities and relationships found in the architecture and construction trades and professions, including labor/management relationships

6. Read, interpret and use technical drawings, documents and specifications to plan a project.

7. Describe career opportunities and means to achieve those opportunities in each of the Architecture & Construction professions, including labor/ management relationships

#### **Career Technical Student Organizations**

Career Technical Student Organizations (CTSOs) align with the 16 career clusters. Students involved in these organizations gain hands-on and real-world work experience that supplements what they learn in the classroom. The following CTSOs align with this career cluster.



**Business Professionals of America** is the leading CTSO designed for students pursuing careers in finance, business administration, management, information systems, digital communication, marketing and other business related fields.

**Family, Career and Community Leaders of America (FCCLA)** is a national student organization that helps youth develop leadership and workplace skills to prepare for both college and careers through peer to peer education, community engagement, and the application of skills learned in the Family and Consumer Sciences (FCS) classroom.

**FFA** is an intracurricular student organization for those interested in agriculture and leadership. It is an integral part of agricultural education in New Mexico and across the country.

The **Technology Student Association (TSA)** is a national student organization devoted exclusively to the needs of students engaged in science, technology, engineering and mathematics (STEM).



## **Recommended Programs of Study**

Pathway	Program Name	Middle School Exploration	Cluster Courses: Introduction	Pathway Courses: Concentrator	Capstone Courses: Completer
Agribusiness Systems	Agribusiness Systems	0131 Agricultural Explorations; 0132 Agricultural Science	0133 Introduction to the Science of Agriculture; 0134 Physical Science of Agriculture	0137 Agricultural Leadership/ Communication; 0171 Agricultural Economics & Business Management	0191 Agricultural Internship/0JT; 0192 Agriculture Entrepreneurship; 0199 Agriculture - Other
Power, Structural & Technical Systems	Agricultural Engineering - CASE	0131 Agricultural Explorations; 0132 Agricultural Science	0138 Introduction to Ag, Food & Natural Resources CASE	0156 Agricultural Power & Technology CASE; 0157 Mechanical Systems in Agriculture CASE	/0197 Agricultural Research & Development CASE; 0199 Agriculture - Other; 0191 Ag Internship/0JT
Animal Systems	Animal Science - CASE	0131 Agricultural Explorations; 0132 Agricultural Science	0138 Introduction to Ag, Food & Natural Resources CASE	0166 Principles of Agricultural Science - Animal CASE; 0167 Animal & Plant Biotechnology CASE; 0177 Food Science and Safety CASE	0197 Agricultural Research & Development CASE; 0199 Agriculture - Other; 0191 Ag Internship/OJT
Animal Systems	Animal Systems	0131 Agricultural Explorations; 0132 Agricultural Science	0133 Introduction to the Science of Agriculture; 0134 Physical Science of Agriculture	0161 Science of Large Agriculture Animals; 0162 Science of Small Animals	0191 Agricultural Internship/OJT; 0192 Agriculture Entrepreneurship; 0199 Agriculture - Other
Food Products & Processing Systems	Food Products & Processing Systems	0131 Agricultural Explorations; 0132 Agricultural Science	0133 Introduction to the Science of Agriculture; 0134 Physical Science of Agriculture	0136 Applied Science in Agriculture; 0173 Food Products and Processing	0191 Agricultural Internship/OJT; 0192 Agricultural Entrepreneurship; 0199 Agriculture - Other
Agribusiness Systems	General Agriculture	0131 Agricultural Explorations; 0132 Agricultural Science	0133 Introduction to the Science of Agriculture; 0134 Physical Science of Agriculture	0141 Horticulture/Botany; 0161 Science of Large Agriculture Animals; 0171 Agricultural Economics & Business Management; 0181 Environmental Science/Natural Resources	0191 Agricultural Internship/OJT; 0192 Agriculture Entrepreneurship; 0199 Agriculture - Other
Natural Resources Systems	Natural Resource Systems	0131 Agricultural Explorations; 0132 Agricultural Science	0133 Introduction to the Science of Agriculture; 0134 Physical Science of Agriculture	0181 Environmental Science/Natural Resources; 0182 Forestry/Wildlife Management; 1774 Wildlife Science	0191 Agricultural Internship/OJT; 0199 Agriculture - Other; 1752 AP Environmental Science
Natural Resources Systems	Natural Resources - CASE	0131 Agricultural Explorations; 0132 Agricultural Science	0138 Introduction to Ag, Food & Natural Resources CASE	0186 Natural Resources and Ecology CASE; 0187 Environmental Science Issues CASE	0197 Agricultural Research & Development CASE; 0199 Agriculture - Other; 0191 Agricultural Internship/OJT; 1752 AP Environmental Science
Plant Systems	Plant & Biotechnology Systems	0131 Agricultural Explorations; 0132 Agricultural Science	0133 Introduction to the Science of Agriculture; 0134 Physical Science of Agriculture	0141 Horticulture/Botany; 0143 Greenhouse/Nursery; 0144 Landscape; 0145 Floriculture	0197 Agricultural Research & Development CASE; 0199 Agriculture - Other; 0191 Ag Internship/OJT
Plant Systems	Plant Science - CASE	0131 Agricultural Explorations; 0132 Agricultural Science	0138 Introduction to Ag, Food & Natural Resources CASE	0146 Principles of Agricultural Science -Plant CASE; 0167 Animal & Plant Biotechnology CASE; 0177 Food Science and Safety CASE	0197 Agricultural Research & Development CASE; 0199 Agriculture - Other; 0191 Agricultural Internship/OJT
Power, Structural & Technical Systems	Power, Structural, & Technical Systems	0131 Agricultural Explorations; 0132 Agricultural Science	0133 Introduction to the Science of Agriculture; 0134 Physical Science of Agriculture; 0151 Introduction to Ag Mechanics	0152 Ag Structures & Construction; 0153 Metal Fabrication for the Agricultural Industry; 0154 Ag Power & Machinery	0191 Agricultural Internship/OJT; 0192 Agriculture Entrepreneurship; 0199 Agriculture - Other



## AGRICULTURE, FOOD AND NATURAL RESOURCES

## Postsecondary Programs, Degrees, and Colleges

High Value Occupation	Pathway	Degrees Awarded	PostSecondary Institution
Forest and Conservation Technicians	Natural Resources Systems	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years	Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Navajo Technical University New Mexico Highlands University New Mexico Institute of Mining and Technology Northern New Mexico College Santa Fe Community College University of New Mexico-Los Alamos Campus University of New Mexico-Main Campus University of the Southwest
First-Line Supervisors of Farming, Fishing, and Forestry Workers	Food Products and Processing Systems	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/ scholarship Master's degree	Central New Mexico Community College Eastern New Mexico University-Main Campus Mesalands Community College Navajo Technical University New Mexico State University-Main Campus Santa Fe Community College
Hazardous Materials Removal Workers	Environmental Service Systems	Associate's degree	Northern New Mexico College
Environmental Science and Protection Technicians, Including Health	Environmental Service Systems	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Central New Mexico Community College Eastern New Mexico University-Main Campus Navajo Technical University New Mexico Institute of Mining and Technology New Mexico State University-Dona Ana Northern New Mexico College Santa Fe Community College University of New Mexico-Los Alamos Campus University of New Mexico-Main Campus University of the Southwest
Biological Technicians	Plant Systems	Associate's degree Bachelor's degree Doctor's degree - research/ scholarship Master's degree Postbaccalaureate certificate	Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Luna Community College Navajo Technical University New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico State University-Main Campus Northern New Mexico College San Juan College Santa Fe Community College University of New Mexico-Main Campus University of the Southwest Western New Mexico University



### Postsecondary Programs, Degrees, and Colleges

High Value Occupation	Pathway	Degrees Awarded	PostSecondary Institution
Environmental Engineers	Environmental Service Systems	Bachelor's degree Master's degree	New Mexico Institute of Mining and Technology New Mexico State University-Main Campus University of New Mexico-Main Campus
Natural Sciences Managers	Natural Resources Systems	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/ scholarship Master's degree Postbaccalaureate certificate	Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Luna Community College Mesalands Community College Navajo Technical University New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico Institute of Mining and Technology New Mexico State University-Main Campus Northern New Mexico College Sant Fe Community College Santa Fe Community College University of New Mexico-Gallup Campus University of New Mexico-Los Alamos Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus University of the Southwest University of the Southwest
Zoologists and Wildlife Biologists	Natural Resources Systems	Bachelor's degree Master's degree	Eastern New Mexico University-Main Campus New Mexico Highlands University New Mexico State University-Main Campus Western New Mexico University
Soil and Plant Scientists	Plant Systems	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/ scholarship Master's degree	Central New Mexico Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus New Mexico Junior College New Mexico State University-Main Campus Western New Mexico University
Farm Equipment Mechanics and Service Technicians	Power, Structural and Technical Systems	*	

\* There are no post secondary offerings for this occupation

#### Data Sources

O\*NET and NCES -U.S. Department of Education data.



#### **Career Readiness Benchmarks**

Workforce Certifications for the Agriculture, Food and Natural Resources Cluster:
Note: Students successfully exiting a course of study in this cluster may be eligible to earn some or all of these certifications.
American Welding Society (AWS)
National Center for Construction Education and Research (NCCER)
NOCTI Horticulture Certification
New Mexico Department of Agriculture: Meat/Dairy Animal Evaluation
New Mexico Department of Agriculture: Companion Animal Care
New Mexico Department of Agriculture: Plant Science
New Mexico Department of Agriculture: Natural Resource Management
New Mexico Department of Agriculture: Food Product Evaluation/Management
New Mexico Department of Agriculture: Secondary Agriculture Business Management
Landscape Irrigator License

#### High school gets you ready for college and career

#### Common Career Technical Core for Architecture and Construction Career Cluster:

1. Use vocabulary, symbols and formulas common to architecture and construction.

2. Use architecture and construction skills to create and manage a project.

3. Comply with regulations and applicable codes to establish and manage a legal and safe workplace.

4. Evaluate the nature and scope of the Architecture & Construction Career Clusters and the role of architecture and construction in society and the economy.

5. Describe the roles, responsibilities and relationships found in the architecture and construction trades and professions, including labor/management relationships.

6. Read, interpret and use technical drawings, documents and specifications to plan a project.

7. Describe career opportunities and means to achieve those opportunities in each of the Architecture & Construction Career Pathways.

#### **Career Technical Student Organizations**

Career Technical Student Organizations (CTSOs) align with the 16 career clusters. Students involved in these organizations gain hands-on and real-world work experience that supplements what they learn in the classroom. The following CTSOs align with this career cluster.

Family, Career and Community Leaders

of America (FCCLA) is a national student organization that helps youth develop leadership and workplace skills to prepare for both college and careers through peer to peer education, community engagement, and the application of skills learned in the Family and Consumer Sciences (FCS) classroom.

The Technology Student Association (TSA)

is a national student organization devoted exclusively to the needs of students engaged in science, technology, engineering and mathematics (STEM).

**SkillsUSA** is a partnership of students, teachers and industry representatives working together to ensure America has a skilled workforce.



# ARCHITECTURE & CONSTRUCTION

# **Recommended Programs of Study**

Pathway	Program Name	Middle School Exploration	Cluster Courses: Introduction	Pathway Courses: Concentrator	Capstone Courses: Completer
Design/ Pre- Construction	CAD Architecture	0401 Construction Career Exploration; 0404 PLTW Green Architecture; 0701 Drafting Careers Exploration	0707 CAD Design & Software; 0480 NCCER Core Curriculum- Intro	0715 CAD Architecture II; 0716 CAD Architecture III; 0717 CAD Architecture IV	0798 Drafting-Co-Op; 0799 Drafting-Other
Design/ Pre- Construction	CAD Engineering	0401 Construction Career Exploration; 0404 PLTW Green Architecture; 0701 Drafting Careers Exploration	0707 CAD Design & Software; 0480 NCCER Core Curriculum- Intro	0718 CAD Engineering II; 0719 CAD Engineering III; 0720 CAD Engineering IV	0798 Drafting-Co-Op; 0799 Drafting-Other
Construction	Carpentry	0401 Construction Career Exploration; 0404 PLTW Green Architecture	0413 Apprenticeship Readiness; 0480 NCCER Core Curriculum- Intro;	0481 Carpentry 1; 0482 Carpentry 2; 0483 Carpentry 3; 0484 Carpentry 4	0498 Construction Trades- Internship; 0499 Construction Trades- Other
Design/ Pre- Construction	Civil Engineering - PLTW	0404 PLTW Green Architecture; 1665 Design & Modeling	1615 Introduction to Engineering & Design; 0480 NCCER Core Curriculum- Intro	1619 PLTW Civil Engineering/ Architecture	1620 PLTW Engineering Design/Development; 0798 Drafting-Co-Op; 0799 Drafting-Other
Construction	Low Voltage Electrical		0413 Apprenticeship Readiness	0446 Low Voltage 1; 0447 Low Voltage 2	0498 Construction Trades- Internship; 0499 Construction Trades- Other
Construction	Electricity	0401 Construction Career Exploration; 0404 PLTW Green Architecture	0413 Apprenticeship Readiness; 0441 Exploration of Electricity/ Electronics; 0480 NCCER Core Curriculum- Intro;	0442 Electricity Comprehensive; 0443 Residential Wiring; 0444 Industrial Electricity; 0445 Topics in Electricity	0498 Construction Trades- Internship; 0499 Construction Trades- Other
Construction	Electricity & Electronics	0401 Construction Career Exploration; 0404 PLTW Green Architecture	0413 Apprenticeship Readiness; 0441 Exploration of Electricity/ Electronics; 0480 NCCER Core Curriculum- Intro;	0452 Electronics-General; 0453 Topics in Electronics; 0462 Electricity/Electronics- General; 0494 Electricity/Electronics- Related Subjects	0498 Construction Trades- Internship; 0499 Construction Trades- Other
Construction	HVAC	0401 Construction Career Exploration; 0404 PLTW Green Architecture	0413 Apprenticeship Readiness; 0431 HVAC 1; 0480 NCCER Core Curriculum- Intro;	0432 HVAC 2; 0436 Heating/Ventilation/Air Conditioning; 0437 Topics in HVACR	0498 Construction Trades- Internship; 0499 Construction Trades- Other
Construction	Mixed Construction Trades	0401 Construction Career Exploration; 0404 PLTW Green Architecture	0402 Construction; 0413 Apprenticeship Readiness 0480 NCCER Core Curriculum- Intro;	0431 HVAC 1; 0438 Plumbing; 0442 Electricity- Comprehensive; 0423 Masonry	0498 Construction Trades- Internship; 0499 Construction Trades- Other
Construction	Plumbing	0401 Construction Career Exploration; 0404 PLTW Green Architecture	0413 Apprenticeship Readiness; 0438 Plumbing; 0480 NCCER Core Curriculum- Intro;	0439 Plumbing & Heating	0498 Construction Trades- Internship; 0499 Construction Trades- Other
Construction	Residential Construction	0401 Construction Career Exploration; 0404 PLTW Green Architecture	0413 Apprenticeship Readiness; 0414 Residential Construction I; 0480 NCCER Core Curriculum- Intro	0415 Residential Construction II	0498 Construction Trades- Internship; 0499 Construction Trades- Other

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## Postsecondary Programs, Degrees, and Colleges

High Value Occupation	Pathway	Degrees Awarded	PostSecondary Institution
First-Line Supervisors of Construction Trades and Extraction Workers	Construction	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of at least 2 but less than 4 years Certificates of less than 1 year Certificates of less than 12 weeks	Central New Mexico Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Roswell Campus Luna Community College Mesalands Community College Navajo Technical University New Mexico Junior College New Mexico State University-Dona Ana New Mexico State University-Grants Northern New Mexico College San Juan College Santa Fe Community College Southeast New Mexico College University of New Mexico-Gallup Campus
Electricians	Construction	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of at least 2 but less than 4 years Certificates of less than 1 year Certificates of less than 12 weeks	Central New Mexico Community College Luna Community College Navajo Technical University New Mexico State University-Dona Ana New Mexico State University-Grants Northern New Mexico College Southeast New Mexico College University of New Mexico-Gallup Campus
Operating Engineers and Other Construction Equipment Operators	Construction	*	
Roustabouts, Oil and Gas	Construction	*	
Carpenters	Construction	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Central New Mexico Community College Luna Community College Navajo Technical University New Mexico State University-Dona Ana New Mexico State University-Grants San Juan College Southeast New Mexico College University of New Mexico-Gallup Campus
Service Unit Operators, Oil and Gas	Construction	*	
Plumbers, Pipefitters, and Steamfitters	Construction	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Central New Mexico Community College Navajo Technical University New Mexico State University-Dona Ana Northern New Mexico College Santa Fe Community College



### **Postsecondary Programs, Degrees, and Colleges**

High Value Occupation	Pathway	Degrees Awarded	PostSecondary Institution
Construction Managers	Construction	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/scholarship Master's degree Post-master's certificate	Central New Mexico Community College Santa Fe Community College
Highway Maintenance Workers	Maintenance/ Operations	*	
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	Maintenance/ Operations	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Central New Mexico Community College Clovis Community College Eastern New Mexico University-Roswell Campus New Mexico State University-Dona Ana Santa Fe Community College Southeast New Mexico College

\* There are no post secondary offerings for this occupation

#### **Career Readiness Benchmarks**

Workforce Certifications for the Architecture & Construction Cluster
Note: Students successfully exiting a course of study in this cluster may be eligible to earn some or all of these certifications.
NCCER: Pre-apprenticeship
NCCER: Core
NCCER: Construction Technology
NCCER: Carpentry
NCCER: Electrical
NCCER: Masonry
NCCER: Plumbing
Percision Exams: CAD Architectural Design I CAD Architectural Design II
Percision Exams: Carpentry Woodworking
Percision Exams: Construction Trades Foundations
NC3 Certifications by program
Certiport Assessment Certification: Autodesk REVIT Architecture 2018 Electrical Building Systems 2018 Mechanical Building Systems 2018 Structures 2018
Certiport Assessment Certification: Inventor Certified User
Certiport Assessment Certification: AutoCAD Certified Professional
Certiport Assessment Certification: OSHA-10 Hour Training for General Industry



#### High school gets you ready for college and career

#### Common Career Technical Core for Arts, Audio/Video, Technology & Communications Cluster

1. Analyze the interdependence of the technical and artistic elements of various careers within the Arts, A/V Technology and Communications Career Cluster.

2. Analyze the importance of health, safety and environmental management systems, policies and procedures common in arts, audio/video technology and communications activities and facilities.

3. Analyze the lifestyle implications and physical demands required in the arts, audio/video technology and communications workplace.

4. Analyze the legal and ethical responsibilities required in the arts, audio/video technology and communications workplace.

5. Describe the career opportunities and means to achieve those opportunities in each of the Arts, A/V Technology and Communications Career Pathways.

6. Evaluate technology advancements and tools that are essential to occupations within the Arts, A/V Technology and Communications Career Cluster

#### **Career Technical Student Organizations**

Career Technical Student Organizations (CTSOs) align with the 16 career clusters. Students involved in these organizations gain hands-on and real-world work experience that supplements what they learn in the classroom. The following CTSOs align with this career cluster.



**Business Professionals of America** is the leading CTSO designed for students pursuing careers in finance, business administration, management, information systems, digital communication, marketing and other business related fields.

**DECA** prepares emerging leaders and entrepreneurs for careers in marketing, finance, hospitality and management in high schools and colleges around the globe.

**Educators Rising** cultivates highly skilled educators by guiding young people on a path to becoming accomplished teachers, beginning in high school and extending through college and into the profession.

Family, Career and Community Leaders of America (FCCLA) is a national student organization that helps youth develop leadership and workplace skills to prepare for both college and careers through peer to peer education, community engagement, and the application of skills learned in the Family and Consumer Sciences (FCS) classroom.

**FFA** is an intracurricular student organization for those interested in agriculture and leadership. It is an integral part of agricultural education in New Mexico and across the country.

**HOSA** – Future Health Professionals is a national student organization recognized by the U.S. Department of Education and the Health Science Education Division of ACTE. HOSA's two-fold mission is to promote career opportunities in the health care industry and to enhance the delivery of quality health care.

**SkillsUSA** is a partnership of students, teachers and industry representatives working together to ensure America has a skilled workforce.

The **Technology Student Association (TSA)** is a national student organization devoted exclusively to the needs of students engaged in science, technology, engineering and mathematics (STEM).

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## **Recommended Programs of Study**

Pathway	Program Name	Middle School Exploration	Cluster Courses: Introduction	Pathway Courses: Concentrator	Capstone Courses: Completer
Performing Arts	Careers in Performing Arts	1603 Career Exploration	1102 Dance Repertory; 1111 Introduction to the Theater; 1122 Concert Band; 1150 Introduction to Art; 1187 Introductory Visual Arts	1112 Drama/Stagecraft; 1113 Drama-Acting/Performance 1189 Visual Art-Other; 1194 Integrated Fine Arts	1186 Visual Art-Independent Study; 1195 Fine/Performing Art-Related 1196 Fine/Performing Art- Independent; 1197 Business of Arts/Media/ Entertainment; 1199 Fine/Performing Arts-Other
Media & Design Arts	Computer Graphics	0354 Art and Computer Science; 1603 Career Exploration	0310 Intro to 3D Design & Animation; 0315 Computer Graphics	0307 Computer Graphics II; 0308 Computer Graphics III; 0309 Computer Graphics IV	0397 Computer/Info Sc-OJT; 0399 Computer/Info Sc-Other
Media & Design Arts	Mass Communications	1300 Communication Exploration	0805 Media Literacy; 1911 Mass Media-Production	1921 Mass Media- Communications; 1996 Multimedia Communications-Independent Study	0889 Academic Career Experience III; 0897 AP Seminar; 1199 Fine/Performing Art-Other; 1606 Work Experience
Media & Design Arts	Media Production	1603 Career Exploration	0805 Media Literacy; 1172 Film/Videotape	1176 Digital Film Production II; 1177 Digital Film Production III; 1178 Digital Film Production IV; 1197 Business of Arts/Media/ Entertainment	0889 Academic Career Experience III; 1199 Fine/Performing Art-Other; 1606 Work Experience
Production & Managerial Arts	Set Design & Construction	0401 Construction Career Exploration	0416 Topics in Carpentry	0495 Construction Trades- Related Subjects; 1197 Business of Arts/Media/ Entertainment	0889 Academic Career Experience III; 1199 Fine/Performing Art-Other; 1606 Work Experience

## Postsecondary Programs, Degrees, and Colleges

High Value Occupation	Pathway	Degrees Awarded	PostSecondary Institution
Producers and Directors	Performing Arts	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree	Central New Mexico Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Institute of American Indian and Alaska Native Culture and Arts Development Luna Community College New Mexico Highlands University New Mexico State University-Dona Ana New Mexico State University-Main Campus Northern New Mexico College Santa Fe Community College University of New Mexico-Main Campus University of New Mexico-Valencia County Campus
Graphic Designers	Visual Arts	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Central New Mexico Community College Clovis Community College Eastern New Mexico University-Roswell Campus Institute of American Indian and Alaska Native Culture and Arts Development Navajo Technical University New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Grants San Juan College Santa Fe Community College Southeast New Mexico College University of New Mexico-Main Campus University of New Mexico-Valencia County Campus Western New Mexico University
Telecommunications Equipment Installers and Repairers, Except Line Installers	Telecommunications	*	
Audio and Video Technicians	Journalism and Broadcasting	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Certificates of less than 12 weeks	New Mexico State University-Alamogordo New Mexico State University-Dona Ana Northern New Mexico College Santa Fe Community College University of New Mexico-Valencia County Campus
Technical Writers	Journalism and Broadcasting	Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Postbaccalaureate certificate	New Mexico Institute of Mining and Technology San Juan College University of New Mexico-Main Campus
Set and Exhibit Designers	Visual Arts	Associate's degree Bachelor's degree	San Juan College Santa Fe Community College University of New Mexico-Main Campus

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High Value Occupation	Pathway	Degrees Awarded	PostSecondary Institution	
News Analysts, Reporters, and Journalists	Journalism and Broadcasting	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree	Central New Mexico Community College Luna Community College New Mexico State University-Dona Ana New Mexico State University-Main Campus Santa Fe Community College University of New Mexico-Main Campus University of the Southwest	
Writers and Authors	Journalism and Broadcasting	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/scholarship Master's degree Postbaccalaureate certificate	Central New Mexico Community College Eastern New Mexico University-Main Campus Institute of American Indian and Alaska Native Culture and Arts Development Luna Community College Navajo Technical University New Mexico Institute of Mining and Technology New Mexico State University-Dona Ana New Mexico State University-Main Campus San Juan College Santa Fe Community College University of New Mexico-Gallup Campus University of New Mexico-Main Campus University of the Southwest	
Editors	Journalism and Broadcasting	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/scholarship Master's degree Postbaccalaureate certificate	Central New Mexico Community College Institute of American Indian and Alaska Native Culture and Arts Development Luna Community College Navajo Technical University New Mexico Institute of Mining and Technology New Mexico State University-Dona Ana New Mexico State University-Main Campus San Juan College Santa Fe Community College University of New Mexico-Main Campus University of the Southwest	
Fine Artists, Including Painters, Sculptors, and Illustrators	Visual Arts	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree Postbaccalaureate certificate	Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Institute of American Indian and Alaska Native Culture and Arts Development Mesalands Community College New Mexico Highlands University New Mexico State University-Alamogordo Santa Fe Community College University of New Mexico-Gallup Campus University of New Mexico-Los Alamos Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus Western New Mexico University	
There are no post secondary offerings for this occupation       Data Sources         0*NET and NCES -U.S. Department of Education data.				

#### **Career Readiness Benchmarks**

Workforce Certifications for the Arts, Audio/Video Technology & Communications:

Note: Students successfully exiting a course of study in this cluster may be eligible to earn some or all of these certifications.

Precision Exams: Video Production I Certificate in Film Production

NOCTI: Audio Visual Communications

Adobe Certified Associate (ACA): 2. Graphic Design & Illustration Using Adobe Illustrator

**OSHA** Certification: Construction

#### High school gets you ready for college and career

#### **Common Career Technical Core for Business Management & Administration Cluster**

1. Utilize mathematical concepts, skills and problem solving to obtain necessary information for decision making in business.

- 2. Describe laws, rules and regulations as they apply to effective business operations.
- $\ensuremath{\mathsf{3.Explore}}$  , develop and apply strategies for ensuring a successful business career.
- 4. Identify, demonstrate and implement solutions in managing effective business customer relations.
- 5. Implement systems, strategies and techniques used to manage information in a business.
- 6. Implement, monitor and evaluate business processes to ensure efficiency and quality results.

#### **Career Technical Student Organizations**

Career Technical Student Organizations (CTSOs) align with the 16 career clusters. Students involved in these organizations gain hands-on and real-world work experience that supplements what they learn in the classroom. The following CTSOs align with this career cluster.

**Business Professionals of America** is the leading CTSO designed for students pursuing careers in finance, business administration, management, information systems, digital communication, marketing and other business related fields.

**DECA** prepares emerging leaders and entrepreneurs for careers in marketing, finance, hospitality and management in high schools and colleges around the globe.

**FFA** is an intracurricular student organization for those interested in agriculture and leadership. It is an integral part of agricultural education in New Mexico and across the country.

**SkillsUSA** is a partnership of students, teachers and industry representatives working together to ensure America has a skilled workforce.





# **Recommended Programs of Study**

Pathway	Program Name	Middle School Exploration	Cluster Courses: Introduction	Pathway Courses: Concentrator	Capstone Courses: Completer
Business Information Management	Business Information Management	0201 Business/Office Career Exploration	0221 Introductory Business	0313 Business Programming	0297 Business Work Experience/Co-op; 0299 Business-Other; 2060 AP Statistics
General Management Pathway	Business Management	0201 Business/Office Career Exploration	0221 Introductory Business	0223 Business Management	0294 AP Microeconomics; 0295 AP Macroeconomics; 0297 Business Work Experience/Co-op; 0299 Business-Other
General Management Pathway	Entrepreneurship	0201 Business/Office Career Exploration	0221 Introductory Business	0207 Accounting; 0224 Business Ownership and Entrepreneurship 0250 Business Law	0294 AP Microeconomics; 0295 AP Macroeconomics; 0297 Business Work Experience/Co-op; 0299 Business-Other
Human Resources Management	Human Resources Management	0201 Business/Office Career Exploration	0221 Introductory Business	0267 Human Resource Management	0297 Business Work Experience/Co-op; 0299 Business-Other; 0897 AP Seminar
High School of Business	High School of Business	0201 Business/Office Career Exploration	0233 Principles of Business/Economics (HSB)	0234 Principles of Marketing/Finance (HSB); 0235 Principles of Management/Business Strategies (HSB)	0294 AP Microeconomics; 0295 AP Macroeconomics; 0297 Business Work Experience/Co-op; 0299 Business-Other
Operations Management	Warehouse Operations Management	0201 Business/Office Career Exploration	0221 Introductory Business	1813 Warehouse Operations	0294 AP Microeconomics; 0295 AP Macroeconomics; 0297 Business Work Experience/Co-op; 0299 Business-Other



## Postsecondary Programs, Degrees, and Colleges

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
General and Operations Managers	General Management	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/ scholarship Master's degree Post-master's certificate	Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Institute of American Indian and Alaska Native Culture and Arts Development Mesalands Community College New Mexico Highlands University New Mexico State University-Alamogordo New Mexico State University-Main Campus Santa Fe Community College University of New Mexico-Gallup Campus University of New Mexico-Gallup Campus University of New Mexico-Los Alamos Campus University of New Mexico-Taos Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus Western New Mexico University
Bookkeeping, Accounting, and Auditing Clerks	Administrative Support	Associate's degree Certificates of at least 1 but less e than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Central New Mexico Community College Eastern New Mexico University Ruidoso Branch Community College Navajo Technical University New Mexico State University-Alamogordo Northern New Mexico College San Juan College Santa Fe Community College Southeast New Mexico College Southeast New Mexico College Southwestern Indian Polytechnic Institute University of New Mexico-Gallup Campus
First-Line Supervisors of Office and Administrative Support Workers	Administrative Support	Associate's degree Bachelor's degree Certificates of at least 1 but less e than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree	Central New Mexico Community College Clovis Community College Eastern New Mexico University-Roswell Campus Luna Community College Navajo Technical University New Mexico Junior College New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Grants Northern New Mexico College San Juan College Southeast New Mexico College University of New Mexico-Gallup Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus University of the Southwest Western New Mexico University



# **Business Management & Administration**

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Management Analysts	Operations Management	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/ scholarship Master's degree Post-master's certificate	Central New Mexico Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Institute of American Indian and Alaska Native Culture and Arts Development Luna Community College Mesalands Community College New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico Institute of Mining and Technology New Mexico Junior College New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Grants New Mexico State University-Grants New Mexico State University-Main Campus Northern New Mexico College San Juan College Santa Fe Community College Southeast New Mexico College Southestern Indian Polytechnic Institute University of New Mexico-Gallup Campus University of New Mexico-Los Alamos Campus University of New Mexico-Taos Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus University of the Southwest Western New Mexico University
Human Resources Specialists	Human Resources Management	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/ scholarship Master's degree Post-master's certificate Postbaccalaureate certificate	Central New Mexico Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Institute of American Indian and Alaska Native Culture and Arts Development Luna Community College Mesalands Community College New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico Institute of Mining and Technology New Mexico Junior College New Mexico State University-Dona Ana New Mexico State University-Main Campus Northern New Mexico College San Juan College Southeast New Mexico College Southeast New Mexico College Southeast New Mexico College University of New Mexico-Gallup Campus University of New Mexico-Los Alamos Campus University of New Mexico-Taos Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus University of the Southwest Western New Mexico University

# **Business Management & Administration**

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Training and Development Specialists	Human Resources Management	Bachelor's degree Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Postbaccalaureate certificate	New Mexico Highlands University University of New Mexico-Main Campus Western New Mexico University
Computer and Information Systems Managers	Business Information Management	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of at least 2 but less than 4 years Certificates of less than 1 year Certificates of less than 12 weeks Doctor's degree - research/ scholarship Master's degree Post-master's certificate Postbaccalaureate certificate	Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Luna Community College Mesalands Community College Navajo Technical University New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico Institute of Mining and Technology New Mexico Junior College New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Main Campus Northern New Mexico College Santa Fe Community College Southwestern Indian Polytechnic Institute University of New Mexico-Los Alamos Campus University of New Mexico-Taos Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus Western New Mexico University
Information and Record Clerks, All Other	Administrative Support	*	
Meeting, Convention, and Event Planners	Operations Management	*	


## **Business Management & Administration**

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Human Resources Managers	Human Resources Management	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Certificates of less than 12 weeks Doctor's degree - research/ scholarship Master's degree Post-master's certificate Postbaccalaureate certificate	Central New Mexico Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Institute of American Indian and Alaska Native Culture and Arts Development Luna Community College Mesalands Community College New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico Institute of Mining and Technology New Mexico Junior College New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Main Campus Northern New Mexico College Sant Juan College Southeast New Mexico College Southeast New Mexico College Southestern Indian Polytechnic Institute University of New Mexico-Gallup Campus University of New Mexico-Los Alamos Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus University of the Southwest Western New Mexico University

\* There are no postsecondary offerings for this occupation

### **Career Readiness Benchmarks**

Workforce Certifications for the Business Management & Administration Cluster:

Note: Students successfully exiting a course of study in this cluster may be eligible to earn some or all of these certifications.

Precision Exams: Business Office Specialist
Precision Exams: Business Concepts
Precision Exams: Entrepreneurship
Precision Exams: Business Management
Precision Exams: Exploring Business and Marketing
DECA School-Based Enterprise: Product/Service Management
DECA School-Based Enterprise: Human Resources Management
MBA Research (A*S*K): Fundamental Business Concepts
MBA Research (A*S*K): Concepts of Entrepreneurship and Management
MBA Research (A*S*K): Fundamentals of Ethics
OSHA: #7510 - Introduction to OSHA for Small Businesses



### High school gets you ready for college and career

#### **Common Career Technical Core for Education & Training Cluster**

1. Apply communication skills with students, parents and other groups to enhance learning and a commitment to learning.

2. Demonstrate effective oral, written and multimedia communication in multiple formats and contexts.

- 3. Use critical thinking to process education communications, perspectives, policies and/or procedures.
- 4. Evaluate and manage risks to safety, health and the environment in education and training settings.
- 5. Demonstrate group collaboration skills to enhance professional education and training practice.
- 6. Analyze ethical and legal policies of professional education and training practice.
- 7. Explain legal rights that apply to individuals and practitioners within education and training settings.
- 8. Demonstrate ethical and legal behavior within and outside of education and training settings.
- 9. Demonstrate state specific professional development requirements to maintain employment and to advance in an

education and training career.

- 10. Apply organizational skills and logic to enhance professional education and training practice.
- 11. Demonstrate group management skills that enhance professional education and training practice

Pathway	Program	Middle School	Cluster Courses:	Pathway Courses:	Capstone Courses:
	Name	Exploration	Introduction	Concentrator	Completer
Teaching/Training	Teacher Education	0525 Introduction to Leadership	0550 Child & Human Development	0562 Teacher Academy 1 (Education Methodology); 0563 Teacher Academy 2 (Education Internship)	0597 Teaching & Practicum -0JT; 0599 Family/Consumer Sc-0ther; 2773 AP Psychology

### **Career Technical Student Organizations**

Career Technical Student Organizations (CTSOs) align with the 16 career clusters. Students involved in these organizations gain hands-on and real-world work experience that supplements what they learn in the classroom. The following CTSOs align with this career cluster.

**Educators Rising** cultivates highly skilled educators by guiding young people on a path to becoming accomplished teachers, beginning in high school and extending through college and into the profession.

Family, Career and Community Leaders of America (FCCLA) is a national student organization that helps youth develop leadership and workplace skills to prepare for both college and careers through peer to peer education, community engagement, and the application of skills learned in the Family and Consumer Sciences (FCS) classroom.

**HOSA** – Future Health Professionals is a national student organization recognized by the U.S. Department of Education and the Health Science Education Division of ACTE. HOSA's twofold mission is to promote career opportunities in the health care industry and to enhance the delivery of quality health care.

**SkillsUSA** is a partnership of students, teachers and industry representatives working together to ensure America has a skilled workforce.

The **Technology Student Association (TSA)** is a national student organization devoted exclusively to the needs of students engaged in science, technology, engineering and mathematics (STEM).





## Postsecondary Programs, Degrees, and Colleges

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Elementary School Teachers, Except Special Education	Teaching/ Training	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree Post-master's certificate Postbaccalaureate certificate	Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Luna Community College Mesalands Community College Navajo Technical University New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico Institute of Mining and Technology New Mexico Junior College New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Grants New Mexico State University-Grants New Mexico State University-Main Campus Northern New Mexico College Sant Juan College Santa Fe Community College Southeast New Mexico College Southesetrn Indian Polytechnic Institute University of New Mexico-Gallup Campus University of New Mexico-Los Alamos Campus University of New Mexico-Taos Campus University of the Southwest Western New Mexico University
Secondary School Teachers, Except Special and Career/Technical Education	Teaching/ Training	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/scholarship Master's degree Post-master's certificate Postbaccalaureate certificate	Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Luna Community College Mesalands Community College Navajo Technical University New Mexico Institute of Mining and Technology New Mexico Institute of Mining and Technology New Mexico State University-Main Campus Northern New Mexico College San Juan College Santa Fe Community College St. John's College University of New Mexico-Gallup Campus University of New Mexico-Los Alamos Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus University of the Southwest Western New Mexico University



## **Education & Training**

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Middle School Teachers, Except Special and Career/Technical Education	Teaching/ Training	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/scholarship Master's degree Post-master's certificate Postbaccalaureate certificate	Central New Mexico Community College Clovis Community College Eastern New Mexico University-Main Campus Luna Community College New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico State University-Main Campus Santa Fe Community College University of New Mexico-Main Campus University of New Mexico-Valencia County Campus University of the Southwest Western New Mexico University
Health Specialties Teachers, Postsecondary	Teaching/ Training	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Certificates of less than 12 weeks Doctor's degree - professional practice Doctor's degree - research/scholarship Master's degree Post-master's certificate Postbaccalaureate certificate	Brookline College-Albuquerque Carrington College-Albuquerque Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Luna Community College Navajo Technical University New Mexico Highlands University New Mexico State University New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Grants New Mexico State University-Grants New Mexico State University-Main Campus Northern New Mexico College Pima Medical Institute-Albuquerque San Juan College Southeast New Mexico College Southeset New Mexico College University of New Mexico-Callup Campus University of New Mexico-Los Alamos Campus University of New Mexico-Taos Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus Western New Mexico University
Educational, Guidance, and Career Counselors and Advisors	Professional Support Services	Associate's degree Certificates of at least 1 but less than 2 years Doctor's degree - research/scholarship Master's degree Post-master's certificate Postbaccalaureate certificate	Eastern New Mexico University-Main Campus Navajo Technical University New Mexico Highlands University New Mexico State University-Main Campus University of New Mexico-Main Campus University of the Southwest Western New Mexico University
Self-Enrichment Teachers	Teaching/ Training	*	

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High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Coaches and Scouts	Teaching/ Training	Associate's degree Bachelor's degree Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/scholarship Master's degree	Central New Mexico Community College Clovis Community College Eastern New Mexico University-Main Campus Luna Community College New Mexico Highlands University New Mexico State University-Main Campus San Juan College Santa Fe Community College University of New Mexico-Main Campus University of the Southwest Western New Mexico University
Education Administrators, Kindergarten through Secondary	Administration and Administrative Support	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/scholarship Master's degree Post-master's certificate Postbaccalaureate certificate	Central New Mexico Community College Navajo Technical University New Mexico Highlands University New Mexico State University-Dona Ana New Mexico State University-Main Campus University of New Mexico-Main Campus University of the Southwest Western New Mexico University
Kindergarten Teachers, Except Special Education	Teaching/ Training	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree Post-master's certificate Postbaccalaureate certificate	Central New Mexico Community College Clovis Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Luna Community College Mesalands Community College Navajo Technical University New Mexico Highlands University New Mexico Junior College New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Grants New Mexico State University-Grants New Mexico State University-Main Campus Northern New Mexico College Southeast New Mexico College Southeast New Mexico College Southwestern Indian Polytechnic Institute St. John's College University of New Mexico-Gallup Campus University of New Mexico-Los Alamos Campus University of New Mexico-Taos Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus University of New Mexico-Valencia County Campus University of the Southwest Western New Mexico University

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## **Education & Training**

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Interpreters and Translators	Professional Support Services	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/scholarship Master's degree	Central New Mexico Community College Eastern New Mexico University-Main Campus Navajo Technical University New Mexico Highlands University New Mexico State University-Main Campus Santa Fe Community College St. John's College University of New Mexico-Main Campus

\* There are no postsecondary offerings for this occupation

#### **Data Sources**

O\*NET and NCES -U.S. Department of Education data.

### **Career Readiness Benchmarks**

Workforce Certifications for the Education & Training Cluster:
Note: Students successfully exiting a course of study in this cluster may be eligible to earn some or all of these certifications.
Pre-professional Certification in Education Careers
Early Childcare Certification
Educational Aide Certification II
Para Pro (Educational Aids)
NM Early Care Education and Family Support
NM Early Care Education and Family Support

### High school gets you ready for college and career

#### Common Career Technical Core for Finance Cluster

- 1. Utilize mathematical concepts, skills and problem solving to obtain necessary information for decision making in the finance industry.
- 2. Utilize tools, strategies and systems to plan, monitor, manage and maintain the use of financial resources.
- 3. Plan, staff, lead and organize human resources in finance to enhance employee productivity and job satisfaction.
- 4. Determine effective tools, techniques and systems to communicate and deliver value to finance customers.
- 5. Create and maintain positive, ongoing relationships with finance customers.
- 6. Plan, monitor and manage day-to-day activities to ensure effective and efficient finance operations.
- 7. Implement safety, health and environmental controls to ensure a safe and productive finance workplace.
- 8. Describe and follow laws, regulations and ethical standards that affect finance operations and transactions.
- 9. Plan, manage and maintain the use of financial resources to protect solvency.
- 10. Plan, organize and manage a finance organization/department.
- 11. Plan, monitor and manage day-to-day activities required to sustain continued business functioning.
- 12. Access, evaluate and disseminate financial information to enhance financial decision making processes.
- 13. Manage a financial product or service mix in order to respond to market opportunities.
- 14. Employ financial risk management strategies and techniques used to minimize business loss.

#### **Career Technical Student Organizations**

Career Technical Student Organizations (CTSOs) align with the 16 career clusters. Students involved in these organizations gain hands-on and real-world work experience that supplements what they learn in the classroom. The following CTSOs align with this career cluster.

**Business Professionals of America** is the leading CTSO designed for students pursuing careers in finance, business administration, management, information systems, digital communication, marketing and other business related fields.

**DECA** prepares emerging leaders and entrepreneurs for careers in marketing, finance, hospitality and management in high schools and colleges around the globe.

**FFA** is an intracurricular student organization for those interested in agriculture and leadership. It is an integral part of agricultural education in New Mexico and across the country. FINANCE

Pathway	Program Name	Middle School Exploration	Cluster Courses: Introduction	Pathway Courses: Concentrator	Capstone Courses: Completer
Business Financial Management	Accounting	0201 Business/Office Career Exploration	0207 Accounting	0210 Advanced Accounting; 0212 Cost Accounting	0294 AP Microeconomics; 0295 AP Macroeconomics; 0297 Business Work Experience/Co-op; 0299 Business-Other; 2060 AP Statistics
Banking & Related Services	Banking Services	0201 Business/Office Career Exploration	0221 Introductory Business	0225 Financial Services	0294 AP Microeconomics; 0295 AP Macroeconomics; 0297 Business Work Experience/Co-op; 0299 Business-Other; 2060 AP Statistics
Financial & Investment Planning	Financial Planning	0201 Business/Office Career Exploration	0231 Financial Spreadsheets	0225 Financial Services	0294 AP Microeconomics; 0295 AP Macroeconomics; 0297 Business Work Experience/Co-op; 0299 Business-Other; 2060 AP Statistics;
Insurance Services	Insurance	0201 Business/Office Career Exploration	0228 Personal & Business Finance	1825 Principals of Selling	0294 AP Microeconomics; 0295 AP Macroeconomics; 0297 Business Work Experience/Co-op; 0299 Business-Other; 2060 AP Statistics;

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## Postsecondary Programs, Degrees, and Colleges

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Accountants and Auditors	Accounting	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of at least 2 but less than 4 years Certificates of less than 1 year Certificates of less than 12 weeks Master's degree Postbaccalaureate certificate	Brookline College-Albuquerque Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Luna Community College Navajo Technical University New Mexico Highlands University New Mexico Junior College New Mexico State University-Main Campus Northern New Mexico College Santa Fe Community College University of New Mexico-Gallup Campus University of New Mexico-Los Alamos Campus University of New Mexico-Main Campus University of the Southwest Western New Mexico University
Insurance Sales Agents	Insurance	*	
Financial Managers	Business Finance	Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree	Brookline College-Albuquerque Central New Mexico Community College Eastern New Mexico University Ruidoso Branch Community College New Mexico State University-Main Campus University of the Southwest
Loan Officers	Banking Services	Bachelor's degree Master's degree	New Mexico State University-Main Campus University of the Southwest
Securities, Commodities, and Financial Services Sales Agents	Securities and Investments	Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Postbaccalaureate certificate	Eastern New Mexico University-Main Campus New Mexico State University-Main Campus
Loan Interviewers and Clerks	Banking Services	Certificates of at least 1 but less than 2 years Certificates of at least 2 but less than 4 years	Eastern New Mexico University-Main Campus Southeast New Mexico College

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High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Budget Analysts	Business Finance	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of at least 2 but less than 4 years Certificates of less than 1 year Master's degree Postbaccalaureate certificate	Central New Mexico Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Luna Community College Navajo Technical University New Mexico Highlands University New Mexico Junior College New Mexico State University-Main Campus Northern New Mexico College Santa Fe Community College University of New Mexico-Gallup Campus University of New Mexico-Los Alamos Campus University of New Mexico-Main Campus University of the Southwest Western New Mexico University
Personal Financial Advisors	Securities and Investments	Bachelor's degree Master's degree Postbaccalaureate certificate	New Mexico State University-Main Campus University of the Southwest

\* There are no postsecondary offerings for this occupation

#### **Data Sources**

O\*NET and NCES -U.S. Department of Education data.

### **Career Readiness Benchmarks**

Workforce Certifications for the FinanceCluster:
Note: Students successfully exiting a course of study in this cluster may be eligible to earn some or all of these certifications.
Precision Exams: Accounting
Precision Exams: Economics
Precision Exams: General Financial Literacy
Precision Exams: Banking and Finance
DECA School-Based Enterprise: Financial Analysis
MBA Research (A*S*K): Concepts of Finance

### High school gets you ready for college and career

#### **Common Career Technical Core for Government & Public Administration Cluster**

1. Explain the purpose and functions of government and public administration and the application of democratic principles in the process of governmental and administrative policymaking.

2. Analyze the systemic relationships of government and public administration agencies.

3. Describe health, safety and environmental management systems, as well as policies and procedures, in government and public administration agencies.

4. Describe the implementation of plans and policies to respond to public health, safety and environmental needs in government and public administration agencies

### **Career Technical Student Organizations**

Career Technical Student Organizations (CTSOs) align with the 16 career clusters. Students involved in these organizations gain hands-on and real-world work experience that supplements what they learn in the classroom. The following CTSOs align with this career cluster.

**Business Professionals of America** is the leading CTSO designed for students pursuing careers in finance, business administration, management, information systems, digital communication, marketing and other business related fields.





Pathway	Program Name	Middle School Exploration	Cluster Courses: Introduction	Pathway Courses: Concentrator	Capstone Courses: Completer
Regulation	Environmental Protection	1603 Career Exploration	0250 Business Law	1751 Environmental Science	0297 Business Work Experience/Co-op; 1752 AP Environmental Science; 2598 Public Protective Social Services-Co-op; 2599 Public Protective Social Services-Other
Governance	Political Science	0201 Business/Office Career Exploration	2501 Exploration of Public Service	2504 Public Administration	0297 Business Work Experience/Co-op; 0897 AP Seminar 2598 Public Protective Social Services-Co-op; 2737 AP Government & Politics: Comparative; 2799 Social Sciences/History-Other
Public Management & Administration	Public Management & Administration	0201 Business/Office Career Exploration	0223 Business Management	2504 Public Administration	0897 AP Seminar; 2060 AP Statistics; 2598 Public Protective Social Services-Co-op; 2799 Social Sciences/History-Other
Revenue & Taxation	Revenue & Taxation	0201 Business/Office Career Exploration	0207 Accounting	0239 Individual Taxation	0294 AP Microeconomics; 0295 AP Macroeconomics; 0297 Business Work Experience/Co-op; 0299 Business-Other
National Security	Security Forces	0201 Business/Office Career Exploration	2501 Exploration of Public Service	2503 Community Protection	2736 AP Government and Politics: United States; 0297 Business Work Experience/Co-op; 2598 Public Protective Social Services-Co-op; 2799 Social Sciences/History-Other
Planning	Urban and Regional Planning	0701 Drafting Careers Exploration; 1603 Career Exploration	2501 Exploration of Public Service	2543 Civil Engineering	0297 Business Work Experience/Co-op 0799 Drafting-Other; 0897 AP Seminar



## Postsecondary Programs, Degrees, and Colleges

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Compliance Officers	Governance	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree Postbaccalaureate certificate	Eastern New Mexico University-Main Campus Navajo Technical University New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico State University-Main Campus Northern New Mexico College Santa Fe Community College University of New Mexico-Los Alamos Campus University of New Mexico-Main Campus University of the Southwest Western New Mexico University
Court, Municipal, and License Clerks	Public Management and Administration	*	
Occupational Health and Safety Specialists	Regulation	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years	Eastern New Mexico University Ruidoso Branch Community College New Mexico State University-Main Campus San Juan College
Eligibility Interviewers, Government Programs	Public Management and Administration	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years	New Mexico State University-Main Campus University of New Mexico-Gallup Campus University of New Mexico-Main Campus
Urban and Regional Planners	Planning	Bachelor's degree Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree	Central New Mexico Community College New Mexico State University-Main Campus University of New Mexico-Main Campus
Agricultural Inspectors	Regulation	*	
Transportation Inspectors	Governance	*	
Emergency Management Directors	Public Management and Administration	Associate's degree Certificates of at least 1 but less than 2 years Master's degree Postbaccalaureate certificate	Eastern New Mexico University-Main Campus New Mexico State University-Dona Ana University of the Southwest Western New Mexico University
Occupational Health and Safety Technicians	Regulation	Bachelor's degree	New Mexico State University-Main Campus



### **GOVERNMENT & PUBLIC ADMINISTRATION**

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Financial Examiners	Governance	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 2 but less than 4 years Certificates of less than 1 year Master's degree Postbaccalaureate certificate	Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Luna Community College Navajo Technical University New Mexico Highlands University New Mexico Junior College New Mexico State University-Main Campus Northern New Mexico College Santa Fe Community College University of New Mexico-Gallup Campus University of New Mexico-Gallup Campus University of New Mexico-Los Alamos Campus University of the Southwest Western New Mexico University

\* There are no postsecondary offerings for this occupation

#### **Data Sources**

O\*NET and NCES -U.S. Department of Education data.

### **Career Readiness Benchmarks**

#### Workforce Certifications for the Government & Public Administration Cluster:

Note: Students successfully exiting a course of study in this cluster may be eligible to earn some or all of these certifications.

Precision Exams: Leadership Principles Precision Exams: Leadership Management A Precision Exams: Leadership Management B

#### High school gets you ready for college and career

#### Common Career Technical Core for Health Science Cluster

1. Determine academic subject matter, in addition to high school graduation requirements, necessary for pursuing a health science career.

2. Explain the healthcare worker's role within their department, their organization, and the overall healthcare system.

3. Identify existing and potential hazards to clients, coworkers, visitors and self in the healthcare workplace.

4. Evaluate the roles and responsibilities of individual members as part of the healthcare team and explain their role in promoting the delivery of quality health care.

5. Analyze the legal and ethical responsibilities, limitations and implications of actions within the healthcare workplace.

6. Evaluate accepted ethical practices with respect to cultural, social and ethnic differences within the healthcare workplace.

### **Career Technical Student Organizations**

Career Technical Student Organizations (CTSOs) align with the 16 career clusters. Students involved in these organizations gain hands-on and real-world work experience that supplements what they learn in the classroom. The following CTSOs align with this career cluster.

**Business Professionals of America** is the leading CTSO designed for students pursuing careers in finance, business administration, management, information systems, digital communication, marketing and other business related fields.

Family, Career and Community Leaders of America (FCCLA) is a national student organization that helps youth develop leadership and workplace skills to prepare for both college and careers through peer to peer education, community engagement, and the application of skills learned in the Family and Consumer Sciences (FCS) classroom.

**FFA** is an intracurricular student organization for those interested in agriculture and leadership. It is an integral part of agricultural education in New Mexico and across the country.

**HOSA** – Future Health Professionals is a national student organization recognized by the U.S. Department of Education and the Health Science Education Division of ACTE. HOSA's two-fold mission is to promote career opportunities in the health care industry and to enhance the delivery of quality health care.

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The **Technology Student Association (TSA)** is a national student organization devoted exclusively to the needs of students engaged in science, technology, engineering and mathematics (STEM).

HEALTH SCIENCE

Pathway	Program Name	Middle School Exploration	Cluster Courses: Introduction	Pathway Courses: Concentrator	Capstone Courses: Completer
Therapeutic Services	Allied Health	1570 Medical Detectives PLTW; 1501 Health Care Occupations	1503 Allied Health Occupations	1506 Home Health Care; 1540 Sports Medicine; 1524 Dental Laboratory Technician; 1523 Dental Assisting	1597 Health Care Sciences-OJT; 1598 Health Care Sciences-Co-Op; 1599 Health Care Sciences-Other
Diagnostic Services	Biomedical Sciences-PLTW	1570 Medical Detectives PLTW	1660 PLTW Principles of Biomedical Sciences-PLTW	1661 Human Body Systems-PLTW; 1662 Medical Intervention- PLTW	1664 Biomedical Innovation-PLTW; 1597 Health Care Sciences-OJT; 1598 Health Care Sciences-Co-Op; 1599 Health Care Sciences-Other
Biotechnology Research & Development	Biotechnology	1501 Health Care Occupations; 1570 Medical Detectives PLTW	1551 Introduction to Biotechnology Research & Development	1550 Medical Anatomy & Physiology	1597 Health Care Sciences-OJT; 1598 Health Care Sciences-Co-Op; 1599 Health Care Sciences-Other; 1725 AP Chemistry
Support Services	Central Service Technician	1501 Health Care Occupations Career Exploration; 1570 Medical Detectives PLTW; 1603 Career Exploration	1502 Health Care Occupations	1519 Central Service Technician	1597 Health Care Sciences-OJT; 1598 Health Care Sciences-Co-Op; 1599 Health Care Sciences-Other; 1715 AP Biology
Health Informatics	Health Informatics- SREB	1603 Career Exploration	1560 Health Informatics Data & Use-AC	1561 Transforming Data into Information-AC; 1562 Transforming Data into Knowledge-AC	1563 Problems & Solutions-AC; 1597 Health Care Sciences-OJT; 1598 Health Care Sciences-Co-Op; 1599 Health Care Sciences-Other
Support Services	Health Science Fundamentals	1501 Health Care Occupations; 1570 Medical Detectives PLTW	1502 Health Care Occupations	1550 Medical Anatomy & Physiology; 1520 Medical Terminology	1597 Health Care Sciences-OJT; 1598 Health Care Sciences-Co-Op; 1599 Health Care Sciences-Other; 1715 AP Biology; 1725 AP Chemistry
Support Services	Medical Interpreter	1501 Health Care Occupations; 1570 Medical Detectives PLTW	1502 Health Care Occupations	1521 Spanish Medical Terminology	1597 Health Care Sciences-OJT; 1598 Health Care Sciences-Co-Op; 1599 Health Care Sciences-Other
Support Services	Medical Office	1501 Health Care Occupations Career Exploration; 1570 Medical Detectives PLTW; 1603 Career Exploration	1502 Health Care Occupations	1513 Medical/Clerical Assisting; 1514 Medical Office	1597 Health Care Sciences-OJT; 1598 Health Care Sciences-Co-Op; 1599 Health Care Sciences-Other; 1715 AP Biology
Therapeutic Services	Pre-Nursing	1501 Health Care Occupations; 1570 Medical Detectives PLTW	1507 Nursing Science I	1504 Nursing-CNA; 1505 Nursing-LPN	1597 Health Care Sciences-OJT; 1598 Health Care Sciences-Co-Op; 1599 Health Care Sciences-Other; 1715 AP Biology; 1725 AP Chemistry
Therapeutic Services	Veterinary Technician	1501 Health Care Occupations; 1570 Medical Detectives PLTW; 0131 Agricultural Explorations; 0132 Agricultural Science	0133 Introduction to the Science of Agriculture; 0134 Physical Science of Agriculture	0161 Science of Large Agriculture Animals; 0162 Science of Small Animals	0164 Veterinary Science/Technician 0191 Ag Internship/0JT; 0199 Agriculture - Other; 1597 Health Care Sciences-0JT; 1599 Health Care Sciences-Other;

HEALTH SCIENCE



Postsecondar	y Programs,	Degrees,	and Colleges

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Registered Nurses	Therapeutic Services	Associate's degree Bachelor's degree Doctor's degree – professional practice Doctor's degree – research/scholarship Master's degree Post-master's certificate	Brookline College-Albuquerque Carrington College-Albuquerque Central New Mexico Community College Clovis Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Luna Community College Navajo Technical University New Mexico Highlands University New Mexico Junior College New Mexico State University-Dona Ana New Mexico State University-Main Campus Northern New Mexico College San Juan College Santa Fe Community College Southeast New Mexico College University of New Mexico-Gallup Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus Western New Mexico University
Medical Secretaries and Administrative Assistants	Health Informatics	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Carrington College-Albuquerque Central New Mexico Community College New Mexico State University-Dona Ana Pima Medical Institute-Albuquerque Southeast New Mexico College
Dental Assistants	Therapeutic Services	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Carrington College-Albuquerque Central New Mexico Community College Luna Community College New Mexico State University-Dona Ana Pima Medical Institute-Albuquerque Santa Fe Community College University of New Mexico-Gallup Campus University of New Mexico-Taos Campus
Medical and Health Services Managers	Support Services	Associate's degree Bachelor's degree Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - professional practice Doctor's degree - research/scholarship Master's degree Postbaccalaureate certificate	Central New Mexico Community College New Mexico State University-Dona Ana New Mexico State University-Main Campus Pima Medical Institute-Albuquerque University of New Mexico-Main Campus University of the Southwest

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HEALTH SCIENCE

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Pharmacy Technicians	Therapeutic Services	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Certificates of less than 12 weeks	Carrington College-Albuquerque Central New Mexico Community College Eastern New Mexico University-Roswell Campus Pima Medical Institute-Albuquerque San Juan College
Licensed Practical and Licensed Vocational Nurses	Therapeutic Services	Associate's degree Certificates of at least 1 but less than 2 years	Brookline College-Albuquerque Carrington College-Albuquerque Clovis Community College Luna Community College New Mexico Junior College New Mexico State University-Dona Ana Northern New Mexico College Pima Medical Institute-Albuquerque Santa Fe Community College Southeast New Mexico College
Nurse Practitioners	Therapeutic Services	Bachelor's degree Doctor's degree - professional practice Doctor's degree - research/scholarship Post-master's certificate	New Mexico State University-Main Campus University of New Mexico-Main Campus
Radiologic Technologists and Technicians	Diagnostic Services	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Central New Mexico Community College Clovis Community College New Mexico State University-Dona Ana Pima Medical Institute-Albuquerque Santa Fe Community College University of New Mexico-Main Campus
Physical Therapist Assistants	Therapeutic Services	Associate's degree	Central New Mexico Community College Clovis Community College Pima Medical Institute-Albuquerque San Juan College
Physical Therapists	Therapeutic Services	Doctor's degree - professional practice	University of New Mexico-Main Campus

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### **Career Readiness Benchmarks**

Workforce Certifications for the Health Science Cluster:
Note: Students successfully exiting a course of study in this cluster may be eligible to earn some or all of these certifications.
Heart Saver CPR
Basic Life Support CPR Certification
National Health Care Foundation Skill Standards
State Certification in Certified Nursing Assistant
Precisions Exams Certification: Biotechnology, Health Sciences Introductions Home Health Aide
BLS AED CPR for Medical Professionals
State Certification in Emergency Medical Technology
NCLEX PN — National Council for Licensure Exam for Practical Nursing
Health Care Professionals First Aid CPR
Biomedical Technician
Certified Coding Associate (CCA)
Certified Medical Assistant (CMA)
Dental Assistant
Dental Radiography (RHA)
Pharmacy Technician (CPhT)
National Health Care Foundation Skill Standards
Phlebotomy Technician (CPT)



#### High school gets you ready for college and career

#### **Common Career Technical Core for Hospitality & Tourism Cluster**

1. Describe the key components of marketing and promoting hospitality and tourism products and services.

2. Evaluate the nature and scope of the Hospitality and Tourism Career Cluster and the role of hospitality and tourism in society and the economy.

3. Demonstrate hospitality and tourism customer service skills that meet customers' needs.

4. Describe employee rights and responsibilities and employers' obligations concerning occupational health and safety in the hospitality and tourism workplace.

5. Identify potential, real and perceived hazards and emergency situations and determine the appropriate safety and security measures in the hospitality and tourism workplace.

6. Describe career opportunities and means to attain those opportunities in each of the Hospitality and Tourism Career Pathways.

### **Career Technical Student Organizations**

Career Technical Student Organizations (CTSOs) align with the 16 career clusters. Students involved in these organizations gain hands-on and real-world work experience that supplements what they learn in the classroom. The following CTSOs align with this career cluster.



**Business Professionals of America** is the leading CTSO designed for students pursuing careers in finance, business administration, management, information systems, digital communication, marketing and other business related fields.

**DECA** prepares emerging leaders and entrepreneurs for careers in marketing, finance, hospitality and management in high schools and colleges around the globe.

#### Family, Career and Community Leaders of America

**(FCCLA)** is a national student organization that helps youth develop leadership and workplace skills to prepare for both college and careers through peer to peer education, community engagement, and the application of skills learned in the Family and Consumer Sciences (FCS) classroom.

**SkillsUSA** is a partnership of students, teachers and industry representatives working together to ensure America has a skilled workforce.



Pathway	Program Name	Middle School Exploration	Cluster Courses: Introduction	Pathway Courses: Concentrator	Capstone Courses: Completer
Lodging	Lodging	0525 Introduction to Leadership	0261 Hospitality & Tourism	0265 Hotel Management I; 0266 Hotel/Lodging Management II	0269 Hotel Management Internship; 0549 Lodging Management Internship
Recreation, Amusements & Attractions	Recreation, Amusements & Attractions		0261 Hospitality & Tourism	0530 Hospitality Entrepreneurship	0297 Business Work Experience/ Co-Op; 0299 Business-Other
Restaurants & Food/ Beverage Services	Restaurants & Food/ Beverage Services- ProStart	0501 Family/ Consumer Sc- Exploratory; 0503 Basic Foods	0504 Nutrition; 0532 ProStart I	0533 ProStart II	0539 ProStart Internship; 0599 Family/Consumer Sc-Other
Restaurants & Food/ Beverage Services	Restaurants & Food/ Beverage Services- ProStart	0501 Family/ Consumer Sc- Exploratory; 0503 Basic Foods	0504 Nutrition; 0540 Introduction to Hospitality & Tourism	0508 Culinary Arts; 0528 Hospitality/ Tourism/ Recreation	0297 Business Work Experience/ Co-Op; 0530 Hospitality Entrepreneurship; 0549 Lodging Management Internship; 0599 Family/Consumer Sc-Other
Travel & Tourism	Travel & Tourism	0525 Introduction to Leadership	0540 Introduction to Hospitality & Tourism	0528 Hospitality/ Tourism/ Recreation; 0530 Hospitality Entrepreneurship	0297 Business Work Experience/ Co-Op; 0599 Family/Consumer Sc-Other



### **Postsecondary Programs, Degrees, and Colleges**

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
First-Line Supervisors of Housekeeping and Janitorial Workers	Lodging	Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Eastern New Mexico University-Roswell Campus New Mexico State University-Dona Ana Santa Fe Community College
Food Service Managers	Restaurants and Food/ Beverage Services	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree	Central New Mexico Community College Eastern New Mexico University Ruidoso Branch Community College Navajo Technical University New Mexico State University-Dona Ana New Mexico State University-Main Campus Santa Fe Community College University of the Southwest
Reservation and Transportation Ticket Agents and Travel Clerks	Travel and Tourism	*	
Chefs and Head Cooks	Restaurants and Food/ Beverage Services	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Central New Mexico Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Luna Community College Navajo Technical University New Mexico State University-Dona Ana Santa Fe Community College University of New Mexico-Taos Campus
First-Line Supervisors of Gaming Services Workers	Recreation, Amusements & Attractions	*	
Lodging Managers	Lodging	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree	Central New Mexico Community College Eastern New Mexico University Ruidoso Branch Community College Navajo Technical University New Mexico State University-Dona Ana New Mexico State University-Main Campus Santa Fe Community College University of the Southwest
Gaming Managers	Recreation, Amusements and Attractions	*	

\* There are no postsecondary offerings for this occupation

### **Career Readiness Benchmarks**

Workforce Certifications for the Hospitality & Tourism Cluster:
Note: Students successfully exiting a course of study in this cluster may be eligible to earn some or all of these certifications.
National Restaurant Association Certifications:
ServSafe Food Handlers
ServSafe Manager
Lodging Management Passport
Lodging Management Program Certification I
Lodging Management Program Certification II
National Restaurant Association Education Foundation:
Customer Service
Food Service Accounting
Manage First
National Restaurant Association Certifications:
ProStart I
ProStart II
NOCTI Certification:
Culinary Arts Level 1 Prep Cook
Culinary Arts Level 2 Cook



#### High school gets you ready for college and career

#### **Common Career Technical Core for Human Services Cluster**

- 1. Evaluate principles of planning, development, implementation and evaluation to accomplish long-range goals in the human services.
- 2. Evaluate the role of the family, community and human services in society and the economy.
- 3. Use effective communication with human services clients and their families.
- 4. Demonstrate ethical and legal conduct in human services settings.
- 5. Evaluate career opportunities in each of the Human Services Career Pathways.
- 6. Explain how human development principles enhance the well-being of individuals and families.

#### **Career Technical Student Organizations**

Career Technical Student Organizations (CTSOs) align with the 16 career clusters. Students involved in these organizations gain hands-on and real-world work experience that supplements what they learn in the classroom. The following CTSOs align with this career cluster.



**Business Professionals of America** is the leading CTSO designed for students pursuing careers in finance, business administration, management, information systems, digital communication, marketing and other business related fields.

**Educators Rising** cultivates highly skilled educators by guiding young people on a path to becoming accomplished teachers, beginning in high school and extending through college and into the profession.

Family, Career and Community Leaders of America (FCCLA) is a national student organization that helps youth develop leadership and workplace skills to prepare for both college and careers through peer to peer education, community engagement, and the application of skills learned in the Family and Consumer Sciences (FCS) classroom.

**FFA** is an intracurricular student organization for those interested in agriculture and leadership. It is an integral part of agricultural education in New Mexico and across the country.

**HOSA** – Future Health Professionals is a national student organization recognized by the U.S. Department of Education and the Health Science Education Division of ACTE. HOSA's two-fold mission is to promote career opportunities in the health care industry and to enhance the delivery of quality health care.

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Pathway	Program Name	Middle School Exploration	Cluster Courses: Introduction	Pathway Courses: Concentrator	Capstone Courses: Completer
Consumer Services	Consumer Services	0525 Introduction to Leadership	2501 Exploration of Public Service	2504 Public Administration; 2595 Public Protective Social Services-Subject	2598 Public Protective Social Services-Co-Op; 2599 Public Protective Social Services-Other; 2773 AP Psychology
Counseling & Mental Health Services	Counseling	0525 Introduction to Leadership	0550 Child & Human Development	0521 Human Growth & Behavior	0597 Teaching & Practicum -0JT; 0599 Family/Consumer Sc-Other; 2773 AP Psychology
Early Childhood Development & Services	Early Childhood Development	0525 Introduction to Leadership	0550 Child & Human Development	0552 Child Development Lab; 0553 Child Development Lab II; 0554 Child Development Lab III; 0555 Child Development Lab IV; 0519 Child Care/Work Experience	0597 Teaching & Practicum -0JT; 0599 Family/Consumer Sc-Other; 2773 AP Psychology
Family & Community Services	Family & Community Services	0525 Introduction to Leadership	0517 Consumer Economics/Personal Finance	0520 Elder Care/Gerontology	0597 Teaching & Practicum -0JT; 0599 Family/Consumer Sc-0ther; 2773 AP Psychology
Personal Care Services	Personal Care Human Services	0525 Introduction to Leadership	0603 Cosmetology- Licensing	0605 Cosmetology-Non- licensing; 0604 Barbering; 0606 Cosmetology-Nail Specialization; 0607 Cosmetology Facial Specialize; 0695 Cosmetology-Related Subjects	0698 Cosmetology- Internship; 0699 Cosmetology-Other



## HUMAN SERVICES

## Postsecondary Programs, Degrees, and Colleges

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Social and Human Service Assistants	Family and Community Services	Associate's degree	New Mexico State University-Alamogordo New Mexico State University-Grants Santa Fe Community College Southeast New Mexico College Western New Mexico University
Child, Family, and School Social Workers	Family and Community Services	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree Postbaccalaureate certificate	Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Roswell Campus Mesalands Community College New Mexico State University-Alamogordo New Mexico State University-Grants New Mexico State University-Main Campus Northern New Mexico College San Juan College Santa Fe Community College Southeast New Mexico College University of New Mexico-Taos Campus Western New Mexico University
Healthcare Social Workers	Family and Community Services	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree Postbaccalaureate certificate	Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Mesalands Community College New Mexico Highlands University New Mexico State University-Alamogordo New Mexico State University-Grants New Mexico State University-Grants New Mexico State University-Main Campus Northern New Mexico College San Juan College Southeast New Mexico College University of New Mexico-Taos Campus Western New Mexico University
Massage Therapists	Personal Care Services	Associate's degree Certificates of at least 1 but less than 2 years	Carrington College-Albuquerque Santa Fe Community College University of New Mexico-Taos Campus
Health Education Specialists	Family and Community Services	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree Postbaccalaureate certificate	New Mexico State University-Dona Ana New Mexico State University-Grants New Mexico State University-Main Campus Santa Fe Community College Southwestern College University of New Mexico-Gallup Campus University of New Mexico-Main Campus University of New Mexico-Taos Campus

HUMAN SERVICES

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High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Community Health Workers	Family and Community Services	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree Postbaccalaureate certificate	Central New Mexico Community College New Mexico State University-Dona Ana New Mexico State University-Grants New Mexico State University-Main Campus Santa Fe Community College Southwestern College University of New Mexico-Gallup Campus University of New Mexico-Main Campus University of New Mexico-Taos Campus
Social and Community Service Managers	Family and Community Services	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/scholarship Master's degree Post-master's certificate Postbaccalaureate certificate	Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Institute of American Indian and Alaska Native Culture and Arts Development Luna Community College Mesalands Community College Navajo Technical University New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico Institute of Mining and Technology New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Grants New Mexico State University-Grants New Mexico State University-Main Campus Northern New Mexico College San Juan College Southeast New Mexico College Southeast New Mexico College Southestern Indian Polytechnic Institute University of New Mexico-Gallup Campus University of New Mexico-Main Campus University of New Mexico-Main Campus University of New Mexico-Taos Campus University of New Mexico-Taos Campus University of New Mexico-Taos Campus University of the Southwest Western New Mexico University



### HUMAN SERVICES

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Mental Health and Substance Abuse Social Workers	Counseling and Mental Health Services	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree Postbaccalaureate certificate	Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Mesalands Community College New Mexico Highlands University New Mexico State University-Alamogordo New Mexico State University-Grants New Mexico State University-Grants New Mexico State University-Main Campus Northern New Mexico College San Juan College Santa Fe Community College Southeast New Mexico College University of New Mexico-Taos Campus Western New Mexico University
Rehabilitation Counselors	Counseling and Mental Health Services	Bachelor's degree Postbaccalaureate certificate	New Mexico Highlands University Western New Mexico University
Marriage and Family Therapists	Counseling and Mental Health Services	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree Postbaccalaureate certificate	Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Roswell Campus Mesalands Community College New Mexico Highlands University New Mexico State University-Alamogordo New Mexico State University-Grants New Mexico State University-Grants New Mexico State University-Main Campus Northern New Mexico College San Juan College Santa Fe Community College Southeast New Mexico College University of New Mexico-Taos Campus Western New Mexico University

#### **Data Sources** 0\*NET and NCES -U.S. Department of Education data.

### **Career Readiness Benchmarks**

### Workforce Certifications for the Human Services Cluster:

Note: Students successfully exiting a course of study in this cluster may be eligible to earn some or all of these certifications.

NM Child Development Association Certification

Cosmetology License

Mental Health First Aid Adult

Mental Health First Aid Youth

Certified Personal Trainer

Child Development Associate Certification

#### High school gets you ready for college and career

#### **Common Career Technical Core for Information Technology Cluster**

1. Demonstrate effective professional communication skills and practices that enable positive customer relationships.

- 2. Use product or service design processes and guidelines to produce a quality information technology (IT) product or service.
- 3. Demonstrate the use of cross-functional teams in achieving IT project goals.
- 4. Demonstrate positive cyber citizenry by applying industry-accepted ethical practices and behaviors.
- 5. Explain the implications of IT on business development.
- 6. Describe trends in emerging and evolving computer technologies and their influence on IT practices.
- 7. Perform standard computer backup and restore procedures to protect IT information.
- 8. Recognize and analyze potential IT security threats to develop and maintain security requirements.
- 9. Describe quality assurance practices and methods employed in producing and providing quality IT products and services.
- 10. Describe the use of computer forensics to prevent and solve information technology crimes and security.
- 11. Demonstrate knowledge of the hardware components associated with information systems.
- 12. Compare key functions and applications of software and determine maintenance strategies for computer.

#### **Career Technical Student Organizations**

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Pathway	Program Name	Middle School Exploration	Cluster Courses: Introduction	Pathway Courses: Concentrator	Capstone Courses: Completer
Information Support & Services	Computer Technology Assistant	0317 Computer Technology	0320 Computer Technology Assistant I	0321 Computer Technology Assistant II; 0322 Computer Technology Assistant III; 0336 AP Computer Science Principles	0336 AP Computer Science Principles; 0327 AP Computer Science A; 0397 Computer/IT Sc-OJT; 0399 Computer/IT Sciences-Other
Information Support & Services	Database Design & Programming- Oracle	0313 Business Programming	0314 Database Foundations-Oracle Academy	0330 Database Design/Programming- Oracle Academy; 0336 AP Computer Science Principles	0331 Database Programming w/ PL/SQL; 0397 Computer/IT Sc-OJT; 0399 Computer/IT Sciences-Other
Information Support & Services	Informatics-SREB	0312 CS/ Programming	0332 Computers, Networks & Databases-AC	0333 Design for the Digital World-AC; 0334 Databases in the Cloud-AC; 0336 AP Computer Science Principles	0335 Developing a Cloud Presence-AC; 0397 Computer/IT Sc-OJT; 0399 Computer/IT Sciences-Other
Network Systems	Networking	0317 Computer Technology	0318 Network Technology	0319 Computer Networking II	0397 Computer/IT Sc-0JT; 0399 Computer/IT Sciences-Other
Network Systems	Networking Academy - Cisco	0317 Computer Technology	0341 CCNA Routing & Switching Part 1-Cisco Academy	0342 CCNA Routing & Switching Part 2	0397 Computer/IT Sc-OJT; 0399 Computer/IT Sciences-Other
Programming & Software Development	Cybersecurity	0312 CS/ Programming	0323 Computer Science/ Programming 0350 Cyber Literacy	0351 Cyber Literacy 2 0353 Cyber and Society 0336 AP Computer Science Principles	0352 Cybersecurity 0397 Computer/IT Sc-OJT 0399 Computer/IT Sciences-Other
Programming & Software Development	Programming & Cybersecurity- PLTW	0348 App Creators-PLTW; 0349 Computer Science for Innovators & Makers	0344 Computer Science Essentials- PLTW	0345 AP Computer Science Principles-PLTW; 0346 AP Computer Science A-PLTW	0346 AP Computer Science A-PLTW 0347 Cybersecurity-PLTW; 0397 Computer/IT Sc-OJT; 0399 Computer/IT Sciences-Other
Programming & Software Development	Computer Science	0312 CS/ Programming	0323 Computer Science/ Programming	0324 Programming; 0325 Advanced Programming; 0326 Computer Programming-Other Lang	0397 Computer/IT Sc-OJT; 0399 Computer/IT Sciences- Other; 0336 AP Computer Science Principles; 0327 AP Computer Science A

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Computer User Support Specialists	Information Support and Services	Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Central New Mexico Community College Mesalands Community College Santa Fe Community College University of New Mexico-Taos Campus
Information Security Analysts	Network Systems	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/ scholarship Master's degree Post-master's certificate Postbaccalaureate certificate	Central New Mexico Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Roswell Campus Navajo Technical University-Roswell Campus New Mexico Institute of Mining and Technology New Mexico State University-Alamogordo New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Dona Ana New Mexico State University-Main Campus Northern New Mexico College San Juan College Santa Fe Community College Southwestern Indian Polytechnic Institute University of New Mexico-Los Alamos Campus University of New Mexico-Main Campus Western New Mexico University
Computer Network Support Specialists	Network Systems	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/ scholarship Master's degree Post-master's certificate	Central New Mexico Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Roswell Campus Luna Community College Mesalands Community College Navajo Technical University New Mexico Institute of Mining and Technology New Mexico Institute of Mining and Technology New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Main Campus San Juan College Santa Fe Community College Southwestern Indian Polytechnic Institute University of New Mexico-Los Alamos Campus University of New Mexico-Taos Campus

## Postsecondary Programs, Degrees, and Colleges

## INFORMATION TECHNOLOGY

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Computer Systems Analysts	Programming and Software Development	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of at least 2 but less than 4 years Certificates of less than 1 year Certificates of less than 1 year Certificates of less than 12 weeks Doctor's degree - research/ scholarship Master's degree	Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Luna Community College Mesalands Community College Navajo Technical University New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico Institute of Mining and Technology New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Main Campus Northern New Mexico College San Juan College Santa Fe Community College University of New Mexico-Los Alamos Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus
Network and Computer Systems Administrators	Network Systems	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of at least 2 but less than 4 years Certificates of less than 1 year Certificates of less than 12 weeks Doctor's degree - research/ scholarship Master's degree	Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Luna Community College Mesalands Community College Navajo Technical University New Mexico Highlands University New Mexico Junior College New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Main Campus Northern New Mexico College Sant Fe Community College University of New Mexico-Los Alamos Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Computer Network Architects	Network Systems	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of at least 2 but less than 4 years Certificates of less than 1 year Certificates of less than 1 year Certificates of less than 12 weeks Doctor's degree - research/ scholarship Master's degree	Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Luna Community College Mesalands Community College Navajo Technical University New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico Institute of Mining and Technology New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Dona Ana New Mexico State University-Main Campus Northern New Mexico College San Juan College Santa Fe Community College University of New Mexico-Los Alamos Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus

Computer Occupations \*\*

\*\* This includes several computer related occupations that are grouped together

#### **Data Sources**

O\*NET and NCES -U.S. Department of Education data.

### **Career Readiness Benchmarks**

Workforce Certifications for the Information Technology Cluster:
Note: Students successfully exiting a course of study in this cluster may be eligible to earn some or all of these certifications.
Certified Novell Administrator
Certified Web Designer
Comp TIA Security+
Comp TIA Server+
Computer Maintenance Technician
iNet+ Certification
jCert JAVA Programmer Certification
Macromedia Director Certification
Microsoft Technology Associate
Windows Operating System Fundamentals



#### High school gets you ready for college and career

#### Common Career Technical Core for Law, Public Safety, Corrections & Securty Cluster

1. Analyze the nature and scope of the Law, Public Safety, Corrections and Security Career Cluster and the role law, public safety, corrections and security play in society and the economy.

2. Formulate ideas, proposals and solutions to ensure effective and efficient delivery of law, public safety, corrections and/or security services.

3. Assess and implement measures to maintain safe and healthy working conditions in a law, public safety, corrections and/or security environment.

4. Conduct law, public safety, corrections and security work tasks in accordance with employee and employer rights, obligations and responsibilities, including occupational safety and health requirements.

5. Analyze the various laws, ordinances, regulations and organizational rules that apply to careers in law, public safety, corrections and security.

6. Describe various career opportunities and means to those opportunities in each of the Law, Public Safety, Corrections and Security Career Pathways.

#### **Career Technical Student Organizations**

Career Technical Student Organizations (CTSOs) align with the 16 career clusters. Students involved in these organizations gain hands-on and real-world work experience that supplements what they learn in the classroom. The following CTSOs align with this career cluster.



**Business Professionals of America** is the leading CTSO designed for students pursuing careers in finance, business administration, management, information systems, digital communication, marketing and other business related fields.

**HOSA** – Future Health Professionals is a national student organization recognized by the U.S. Department of Education and the Health Science Education Division of ACTE. HOSA's two-fold mission is to promote career opportunities in the health care industry and to enhance the delivery of quality health care.

**SkillsUSA** is a partnership of students, teachers and industry representatives working together to ensure America has a skilled workforce.



Pathway	Program Name	Middle School Exploration	Cluster Courses: Introduction	Pathway Courses: Concentrator	Capstone Courses: Completer
Emergency & Fire Management Services	Emergency & Fire Management	1405 Safety & First Aid	2501 Exploration of Public Service	2523 Fire Fighting; 1517 Emergency Medical Technician (Career/ Technical)	2598 Public Protective Social Services-Co-op; 2599 Public Protective Social Services-Other
Emergency & Fire Management Services	Emergency Medical Technician-Basic	1405 Safety & First Aid 1501 Health Care Occupations Career	1502 Health Care Occupations	1516 EKG Technician; 1517 Emergency Medical Technician; 1550 Medical Anatomy & Physiology; 1792 Emergency Medical Tech (Applied Science)	1597 Health Care Sciences-OJT; 1598 Health Care Sciences- Co-Op; 1599 Health Care Sciences- Other
Legal Services	Law	1603 Career Exploration	2761 Law Studies	2763 Business Law; 2762 Consumer Law; 2765 Mock Trial	0897 AP Seminar; 2598 Public Protective Social Services-Co-op; 2599 Public Protective Social Services-Other; 2773 AP Psychology
Law Enforcement Services	Law Enforcement	1603 Career Exploration	2501 Exploration of Public Service	2513 Criminal Justice Assisting; 1718 Forensic Science; 2761 Law Studies; 2503 Community Protection	2598 Public Protective Social Services-Co-op; 2599 Public Protective
Security & Protective Services	Military Science	1603 Career Exploration	2111 Introduction to ROTC	2112 Military ROTC; 2121 ROTC Drill; 2195 Military Science- Related Subjects	2199 Military Science-Other


## Postsecondary Programs, Degrees, and Colleges

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Police and Sheriff's Patrol Officers	Law Enforcement Services	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Brookline College-Albuquerque Central New Mexico Community College Clovis Community College Eastern New Mexico University-Roswell Campus Luna Community College Navajo Technical University New Mexico Junior College San Juan College Santa Fe Community College Southeast New Mexico College Western New Mexico University
Lawyers	Legal Services	Doctor's degree - professional practice Doctor's degree - research/ scholarship Master's degree	University of New Mexico-Main Campus
Paralegals and Legal Assistants	Legal Services	Associate's degree Certificates of at least 1 but less than 2 years	Central New Mexico Community College Clovis Community College Navajo Technical University New Mexico Junior College New Mexico State University-Alamogordo New Mexico State University-Dona Ana San Juan College Santa Fe Community College University of New Mexico-Gallup Campus
Firefighters	Emergency and Fire Management Services	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Roswell Campus Luna Community College New Mexico State University-Dona Ana San Juan College University of New Mexico-Los Alamos Campus
Detectives and Criminal Investigators	Law Enforcement Services	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Postbaccalaureate certificate	Brookline College-Albuquerque Central New Mexico Community College Clovis Community College Eastern New Mexico University-Roswell Campus Luna Community College Navajo Technical University New Mexico Junior College San Juan College Santa Fe Community College Southeast New Mexico College Western New Mexico University
Public Safety Telecommunicators	Emergency and Fire Management Services	*	

## LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY

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<b>High Value Occupation</b>	Pathway	Degrees Awarded	Postsecondary Institution
First-Line Supervisors of Firefighting and Prevention Workers	Emergency and Fire Management Services	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Roswell Campus Luna Community College New Mexico State University-Dona Ana San Juan College University of New Mexico-Los Alamos Campus
Probation Officers and Correctional Treatment Specialists	Correction Services	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree Postbaccalaureate certificate	Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Roswell Campus Mesalands Community College New Mexico State University-Alamogordo New Mexico State University-Grants New Mexico State University-Grants New Mexico State University-Main Campus Northern New Mexico College San Juan College Santa Fe Community College Southeast New Mexico College University of New Mexico-Taos Campus Western New Mexico University
Title Examiners, Abstractors, and Searchers	Legal Services	Associate's degree Certificates of at least 1 but less than 2 years	Central New Mexico Community College Clovis Community College Navajo Technical University New Mexico Junior College New Mexico State University-Alamogordo New Mexico State University-Dona Ana San Juan College Santa Fe Community College University of New Mexico-Gallup Campus



## LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY

First-Line Supervisors of Police and Detectives Law Enforcement Services Associate's degree Certificates of at least 1 but less than 1 year Certificates of at least 12 weeks Navajo Technical University-Alamogordo   Police and Detectives Law Enforcement Services Certificates of at least 12 weeks New Mexico State University-Grants   Raster's degree Certificates of at least 12 weeks New Mexico State University-Grants New Mexico State University-Grants   Police and Detectives Services Certificates of at least 12 weeks New Mexico State University-Grants   Master's degree New Mexico State University-Grants New Mexico State University-Grants   Police and Detectives Services Services Santa Fe Community College   New Mexico State University-Alamogordo New Mexico State University-Grants New Mexico State University-Grants   New Mexico State University-Grants Services Santa Fe Community College New Mexico State University-Grants   New Mexico State University-Grants New Mexico State University-Grants New Mexico State University-Grants New Mexico State University-Main Campus   New Mexico State University of New Mexico-Cellege New Mexico College New Mexico College New Mexico State University of New Mexico-Gallup Campus   University of New Mexico-Gallup Campus	High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
University of New Mexico-Valencia County Campus University of the Southwest Western New Mexico University			Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Certificates of less than 12 weeks Master's degree	Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Luna Community College Mesalands Community College Navajo Technical University New Mexico Highlands University New Mexico State University-Alamogordo New Mexico State University-Alamogordo New Mexico State University-Grants New Mexico State University-Grants New Mexico State University-Grants New Mexico State University-Main Campus Northern New Mexico College Santa Fe Community College Southeast New Mexico College University of New Mexico-Gallup Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus University of the Southwest

\* There are no postsecondary offerings for this occupation

#### **Data Sources**

O\*NET and NCES -U.S. Department of Education data.

## **Career Readiness Benchmarks**

#### Workforce Certifications for the Law, Public Safety, Corrections & Security Cluster:

Note: Students successfully exiting a course of study in this cluster may be eligible to earn some or all of these certifications.

American Heart Association CPR, BLS, AED, ACLS, PALS, or PEARS

Red Cross AED, CPR, BLS, ALS or PALS

Basic Wildland Firefighting Certification

Emergency Medical Technician (EMT)

Paralegal Studies Certification

CERT or ICS

Precision Exams Certification: Law Enforcement



#### High school gets you ready for college and career

#### Common Career Technical Core for Manufacturing Cluster

- 1. Evaluate the nature and scope of the Manufacturing Career Cluster and the role of manufacturing in society and in the economy.
- 2. Analyze and summarize how manufacturing businesses improve performance.
- 3. Comply with federal, state and local regulations to ensure worker safety and health and environmental work practices.
- 4. Describe career opportunities and means to achieve those opportunities in each of the Manufacturing Career Pathways.
- 5. Describe government policies and industry standards that apply to manufacturing.
- 6. Demonstrate workplace knowledge and skills common to manufacturing.

### **Career Technical Student Organizations**

Career Technical Student Organizations (CTSOs) align with the 16 career clusters. Students involved in these organizations gain hands-on and real-world work experience that supplements what they learn in the classroom. The following CTSOs align with this career cluster.

**FFA** is an intracurricular student organization for those interested in agriculture and leadership. It is an integral part of agricultural education in New Mexico and across the country.

**SkillsUSA** is a partnership of students, teachers and industry representatives working together to ensure America has a skilled workforce.

The **Technology Student Association (TSA)** is a national student organization devoted exclusively to the needs of students engaged in science, technology, engineering and mathematics (STEM).

## **Recommended Programs of Study**

Pathway	Program Name	Middle School Exploration	Cluster Courses: Introduction	Pathway Courses: Concentrator	Capstone Courses: Completer
Production	Automated Materials Joining-SREB	1603 Career Exploration	1636 Introduction to Automated Materials Joining-AC	1637 Applications in Automated Materials Joining-AC; 1638 Advanced Concepts in Materials Joining-AC	1639 Projects in Automated Materials Joining-AC; 1606 Work Experience
Manufacturing Production Process Development	Computer Integrated Manufacturing-PLTW	1668 Automation & Robotics-PLTW; 1602 Gateway to Technology-PLTW	1615 Introduction to Engineering Design- PLTW	1618 Computer Integrated Manufacturing-PLTW	1620 PLTW Capstone- Engineering Design/ Development; 1606 Work Experience
Quality Assurance	Integrated Production Technologies-SREB	1603 Career Exploration	1683 Advanced Technology for Design & Production-AC	1684 Systems of Advanced Technology-AC; 1685 Mechatronic Systems for Advanced Production-AC	1686 Design for the Production of Advanced Products-AC; 1606 Work Experience
Maintenance, Installation & Repair	Maintenance, Installation & Repair	0401 Construction Career Exploration	0462 Electricity/ Electronics-General	0473 Building Maintenance; 1634 Equipment Maintenance & Repair	0498 Construction Trades- Internship; 0499 Construction Trades- Other
Manufacturing Production Process Development	Manufacturing Systems	1603 Career Exploration	1623 Production Systems	1624 Manufacturing Systems	1699 Technology Education-Other; 1606 Work Experience
Manufacturing Production Process Development	Welding	0401 Construction Career Exploration	2414 Welding	2415 Particular Topics in Welding; 2416 Welding 2; 2417 Welding 3	2497 Precision Metalwork- OJT; 2498 Precision Metalwork- Co-Op; 2499 Precision Metalwork- Other



Postsecondary Programs, Degre	es, and Colleges
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High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Maintenance and Repair Workers, General	Maintenance, Installatior and Repair	Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Eastern New Mexico University-Roswell Campus New Mexico State University-Dona Ana Santa Fe Community College
Industrial Machinery Mechanics	Maintenance, Installatior and Repair	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Navajo Technical University San Juan College Southeast New Mexico College
First-Line Supervisors of Mechanics, Installers, and Repairers	Maintenance, Installation and Repair	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Clovis Community College New Mexico State University-Dona Ana New Mexico State University-Dona Ana
Welders, Cutters, Solderers, and Brazers	Production	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of at least 2 but less than 4 years Certificates of less than 1 year	Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Roswell Campus Luna Community College Navajo Technical University New Mexico Junior College New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Grants San Juan College Santa Fe Community College Southeast New Mexico College University of New Mexico-Gallup Campus University of New Mexico-Valencia County Campus Western New Mexico University
First-Line Supervisors of Production and Operating Workers	Production	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Clovis Community College San Juan College

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MANUFACTURING

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Security and Fire Alarm Systems Installers	Maintenance, Installatior and Repair	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of at least 2 but less than 4 years Certificates of less than 1 year	Central New Mexico Community College Luna Community College Navajo Technical University New Mexico State University-Dona Ana New Mexico State University-Grants Northern New Mexico College Southeast New Mexico College University of New Mexico-Gallup Campus
Electrical and Electronic Engineering Technologists and Technicians	Manufacturing Production Process Development	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year	Central New Mexico Community College Clovis Community College Eastern New Mexico University-Main Campus Luna Community College New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Grants New Mexico State University-Grants New Mexico State University-Main Campus Northern New Mexico College San Juan College Santa Fe Community College Southeast New Mexico College University of New Mexico-Gallup Campus University of New Mexico-Los Alamos Campus University of New Mexico-Valencia County Campus Western New Mexico University
Machinists	Production	Associate's degree Certificates of at least 1 but less than 2 years	Central New Mexico Community College Santa Fe Community College
Medical Equipment Repairers	Maintenance, Installation and Repair	Associate's degree Certificates of at least 1 but less than 2 years	New Mexico State University-Alamogordo New Mexico State University-Dona Ana
Coating, Painting, & Spraying Machine Setters, Operators, & Tenders	Production	Associate's degree Certificates of at least 1 but less than 2 years	Luna Community College San Juan College University of New Mexico-Gallup Campus

## **Data Sources**

O\*NET and NCES -U.S. Department of Education data.

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Workforce Certifications for the	Manufacturing Cluster:
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Note: Students successfully exiting a course of study in this cluster may be eligible to earn some or all of these certifications.

NCCER Basic Core
AWS-SENSE
Welding Technician
NCCER HVAC Excellence
S/P2 Valvoline Safety & Pollution Prevention
NCCER Industrial Maintenance
NCCER Sheet Metal
NCCER Welding
Gas Metal Arc Welding
Gas Tungsten Arc Welding
Shielded Metal Arc Welding
Flux Core Arc Welding D9.4 4 2F
PhlebFlux Core Arc Welding D9.4 4 2F
NCCER Industrial Maintenance

#### High school gets you ready for college and career

#### **Common Career Technical Core for Marketing Cluster**

- 1. Describe the impact of economics, economics systems and entrepreneurship on marketing.
- 2. Implement marketing research to obtain and evaluate information for the creation of a marketing plan.
- 3. Plan, monitor, manage and maintain the use of financial resources for marketing activities.
- 4. Plan, monitor and manage the day-to-day activities required for continued marketing business operations.
- 5. Describe career opportunities and the means to achieve those opportunities in each of the Marketing Career Pathways.
- 6. Select, monitor and manage sales and distribution channels.
- 7. Determine and adjust prices to maximize return while maintaining customer perception of value.
- 8. Obtain, develop, maintain and improve a product or service mix in response to market opportunities.
- 9. Communicate information about products, services, images and/or ideas to achieve a desired outcome.

10. Use marketing strategies and processes to determine and meet client needs and wants.

### **Career Technical Student Organizations**

Career Technical Student Organizations (CTSOs) align with the 16 career clusters. Students involved in these organizations gain hands-on and real-world work experience that supplements what they learn in the classroom. The following CTSOs align with this career cluster.



**Business Professionals of America** is the leading CTSO designed for students pursuing careers in finance, business administration, management, information systems, digital communication, marketing and other business related fields.

**DECA** prepares emerging leaders and entrepreneurs for careers in marketing, finance, hospitality and management in high schools and colleges around the globe.

**FFA** is an intracurricular student organization for those interested in agriculture and leadership. It is an integral part of agricultural education in New Mexico and across the country.

**SkillsUSA** is a partnership of students, teachers and industry representatives working together to ensure America has a skilled workforce.

## **Recommended Programs of Study**

Pathway	Program Name	Middle School Exploration	Cluster Courses: Introduction	Pathway Courses: Concentrator	Capstone Courses: Completer
Marketing Communications	Marketing Communications	1801 Marketing Career Exploration	1802 Principles of Marketing - Fundamentals	1824 Principles of Advertising; 1832 Marketing Strategy	0897 AP Seminar; 1808 Marketing Lab Advanced; 1897 Marketing-Mentorship/ Internship; 1898 Marketing Work Experience- Co-Op; 1899 Marketing-Other
Marketing Management	Marketing Management	1801 Marketing Career Exploration	1802 Principles of Marketing - Fundamentals	1826 Marketing Management	1808 Marketing Lab Advanced; 1897 Marketing-Mentorship/ Internship; 1898 Marketing Work Experience- Co-Op; 1899 Marketing-Other
Marketing Research	Marketing Research	1801 Marketing Career Exploration	1802 Principles of Marketing - Fundamentals	1834 Marketing Research	0897 AP Seminar; 1808 Marketing Lab Advanced; 1897 Marketing-Mentorship/ Internship; 1898 Marketing Work Experience- Co-Op; 1899 Marketing-Other
Merchandising	Merchandising	1801 Marketing Career Exploration	1802 Principles of Marketing - Fundamentals	1814 Retail Marketing	1808 Marketing Lab Advanced; 1897 Marketing-Mentorship/ Internship; 1898 Marketing Work Experience- Co-Op; 1899 Marketing-Other
Professional Sales	Professional Sales	1801 Marketing Career Exploration	1825 Principles of Selling	1807 Marketing Lab; 1804 Marketing-Real Estate	1808 Marketing Lab Advanced; 1897 Marketing-Mentorship/ Internship; 1898 Marketing Work Experience- Co-Op; 1899 Marketing-Other

MARKETING

## Postsecondary Programs, Degrees, and Colleges

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	Professional Sales	Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Certificates of less than 12 weeks	Central New Mexico Community College New Mexico State University-Dona Ana
Market Research Analysts and Marketing Specialists	Marketing Research	Associate's degree Bachelor's degree Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree Postbaccalaureate certificate	Central New Mexico Community College Eastern New Mexico University-Main Campus New Mexico State University-Main Campus San Juan College University of the Southwest Western New Mexico University
Real Estate Sales Agents	Professional Sales	*	
Property, Real Estate, and Community Association Managers	Marketing Management	*	
Public Relations Specialists	Marketing Communications	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree	Central New Mexico Community College Eastern New Mexico University-Main Campus New Mexico State University-Main Campus University of New Mexico-Gallup Campus University of New Mexico-Main Campus University of the Southwest
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	Professional Sales	*	

MARKETING

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High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Sales Managers	Marketing Management	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/scholarship Master's degree Post-master's certificate	Central New Mexico Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Institute of American Indian and Alaska Native Culture and Arts Development Luna Community College Mesalands Community College New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico Junior College New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Grants New Mexico State University-Grants New Mexico State University-Main Campus Northern New Mexico College San Juan College Southeast New Mexico College Southeast New Mexico College Southestern Indian Polytechnic Institute University of New Mexico-Gallup Campus University of New Mexico-Taos Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus University of the Southwest Western New Mexico University
Advertising Sales Agents	Professional Sales	*	
Marketing Managers	Marketing Management	Associate's degree Bachelor's degree Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree	Central New Mexico Community College New Mexico State University-Main Campus San Juan College University of the Southwest Western New Mexico University
Real Estate Brokers	Professional Sales	*	

\* There are no postsecondary offerings for this occupation

### **Career Readiness Benchmarks**

#### Workforce Certifications for the Marketing Cluster:

Note: Students successfully exiting a course of study in this cluster may be eligible to earn some or all of these certifications.

Precision Exams: Digital Business Applications

Precision Exams: Digital Marketing

Precision Exams: Exploring Business and Marketing

DECA School-based Enterprise: Marketing Information Management

DECA School-based Enterprise: Market Planning

DECA School-based Enterprise: Pricing

DECA School-based Enterprise: Selling

#### High school gets you ready for college and career

#### Common Career Technical Core for Science, Technology, Engineering & Mathematics Cluster

- 1. Apply engineering skills in a project that requires project management, process control and quality assurance.
- $\ensuremath{\mathbf{2}}.$  Use technology to acquire, manipulate, analyze and report data.
- 3. Describe and follow safety, health and environmental standards related to science, technology, engineering and mathematics (STEM) workplaces.
- 4. Understand the nature and scope of the STEM Career Cluster and the role of STEM in society and the economy.
- 5. Demonstrate an understanding of the breadth of career opportunities and means to those opportunities in each of the STEM Career Pathways.
- 6. Demonstrate technical skills needed in a chosen STEM field

## **Career Technical Student Organizations**

Career Technical Student Organizations (CTSOs) align with the 16 career clusters. Students involved in these organizations gain hands-on and real-world work experience that supplements what they learn in the classroom. The following CTSOs align with this career cluster.

**FFA** is an intracurricular student organization for those interested in agriculture and leadership. It is an integral part of agricultural education in New Mexico and across the country.

**HOSA** – Future Health Professionals is a national student organization recognized by the U.S. Department of Education and the Health Science Education Division of ACTE. HOSA's two-fold mission is to promote career opportunities in the health care industry and to enhance the delivery of quality health care.

**SkillsUSA** is a partnership of students, teachers and industry representatives working together to ensure America has a skilled workforce.

The **Technology Student Association (TSA)** is a national student organization devoted exclusively to the needs of students engaged in science, technology, engineering and mathematics (STEM).





## **Recommended Programs of Study**

Pathway	Program Name	Middle School Exploration	Cluster Courses: Introduction	Pathway Courses: Concentrator	Capstone Courses: Completer
Engineering & Technology	Aerospace Engineering - SREB	1603 Career Exploration	1674 Fundamentals Aerospace Tech- AC	1675 Advanced Aerospace Technology-AC; 1676 Aeronautics Engineering Applications- AC	1606 Work Experience; 1677 Astronautics Engineering Applications-AC; 1699 Technology Education- Other; 1739 AP Physics 1; 1740 AP Physics 2
Engineering & Technology	Aerospace Rocketry Engineering - SystemsGo	1603 Career Exploration	1644 SystemsGo/ Intro to Engineering	1645 SystemsGo Tsiolkovsky Level;	1606 Work Experience; 1646 SystemsGo Oberth Level; 1647 SystemsGo Goddard Level; 1699 Technology Education - Other
Science & Mathematics	Clean Energy Technology - SREB	1603 Career Exploration	1678 Clean Energy Systems-AC	1679 Clean Energy Applications-AC; 1680 Clean Energy Strategies-AC	1606 Work Experience; 1681 Clean Energy Innovations-AC; 1699 Technology Education- Other;
Engineering & Technology	Energy & Power - SREB	1603 Career Exploration	0964 Energy & Power Foundations-AC	0965 Energy Transmission & Distribution-AC; 0966 Electronics & Control Systems-AC	0967 Advanced Science & Engineering Systems-AC; 1606 Work Experience; 1699 Technology Education- Other
Engineering & Technology	Engineering - PLTW	1602 Gateway to Technology-PLTW (or other PLTW MS courses that are part of GTT)	1615 Introduction to Engineering Design-PLTW	1617 Principles of Engineering-PLTW; 1616 Digital Electronics- PLTW; 1621 Aerospace Engineering-PLTW; 0183 PLTW Environmental Sustainability	1606 Work Experience; 1620 Capstone-Engineering Design/Development-PLTW; 1699 Technology Education- Other; 1739 AP Physics 1; 1740 AP Physics 2
Engineering & Technology	Energy & Natural Resource Management	1603 Career Exploration	1687 Foundations of Energy and Natural Resources Management	1688 Energy and Power - Generation and Distribution; 1689 Applications of Integrated Energy Systems	1690 Energy and Natural Resources Management Practicum and Advanced Applications; 1697 Technology Education - OJT; 1699 Technology Education- Other
Science & Mathematics	Innovations in Science & Technology - SREB	1603 Career Exploration	1670 Nature of Science/ Technology-AC	1671 Core Applications of Science/Technology-AC; 1672 Impacts of Science/ Technology-AC	1606 Work Experience; 1673 Creativity & Innovations-AC; 1699 Technology Education- Other

## Postsecondary Programs, Degrees, and Colleges

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Environmental Scientists and Specialists, Including Health	Science and Mathematics	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Master's degree	Central New Mexico Community College Eastern New Mexico University-Main Campus Navajo Technical University New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico State University-Main Campus Northern New Mexico College Santa Fe Community College University of New Mexico-Los Alamos Campus University of New Mexico-Main Campus University of the Southwest Western New Mexico University
Electrical Engineers	Engineering and Technology	Associate's degree Bachelor's degree Master's degree Postbaccalaureate certificate	Navajo Technical University New Mexico Institute of Mining and Technology New Mexico State University-Main Campus University of New Mexico-Main Campus
Architectural and Engineering Managers	Engineering and Technology	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/scholarship Master's degree Post-master's certificate Postbaccalaureate certificate	Central New Mexico Community College Luna Community College Navajo Technical University New Mexico Institute of Mining and Technology New Mexico State University-Dona Ana New Mexico State University-Main Campus Northern New Mexico College San Juan College Santa Fe Community College Southeast New Mexico College Southeast New Mexico College Southwestern Indian Polytechnic Institute University of New Mexico-Los Alamos Campus University of New Mexico-Valencia County Campus
Mechanical Engineers	Engineering and Technology	Bachelor's degree Doctor's degree - research/scholarship Master's degree Postbaccalaureate certificate	Navajo Technical University New Mexico Institute of Mining and Technology New Mexico State University-Main Campus University of New Mexico-Main Campus

## SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Computer and Information Research Scientists	Science and Mathematics	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of at least 2 but less than 4 years Certificates of less than 1 year Certificates of less than 12 weeks Doctor's degree - research/scholarship Master's degree Post-master's certificate	Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Luna Community College Mesalands Community College Navajo Technical University New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico Junior College New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Main Campus Northern New Mexico College San Juan College Santa Fe Community College University of New Mexico-Los Alamos Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus
Electronics Engineers, Except Computer	Engineering and Technology	Associate's degree Bachelor's degree Master's degree Postbaccalaureate certificate	Navajo Technical University New Mexico Institute of Mining and Technology New Mexico State University-Main Campus University of New Mexico-Main Campus
Aerospace Engineers	Engineering and Technology	Associate's degree Bachelor's degree Doctor's degree - research/scholarship Master's degree Postbaccalaureate certificate	Navajo Technical University New Mexico Institute of Mining and Technology New Mexico State University-Main Campus University of New Mexico-Main Campus
Industrial Engineers	Engineering and Technology	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Master's degree Postbaccalaureate certificate	Navajo Technical University New Mexico Institute of Mining and Technology New Mexico State University-Dona Ana New Mexico State University-Main Campus University of New Mexico-Main Campus
Chemists	Science and Mathematics	Associate's degree Bachelor's degree Doctor's degree - research/scholarship Master's degree	Central New Mexico Community College Eastern New Mexico University-Main Campus New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico State University-Main Campus San Juan College University of New Mexico-Main Campus Western New Mexico University

## SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Geoscientists, Except Hydrologists and Geographers	Science and Mathematics	Associate's degree Bachelor's degree Doctor's degree - research/scholarship Master's degree Postbaccalaureate certificate	Central New Mexico Community College Eastern New Mexico University-Main Campus Mesalands Community College New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico State University-Main Campus San Juan College University of New Mexico-Main Campus

#### Data Sources

O\*NET and NCES -U.S. Department of Education data.

## **Career Readiness Benchmarks**

#### Workforce Certifications for the Manufacturing Cluster:

Note: Students successfully exiting a course of study in this cluster may be eligible to earn some or all of these certifications.

Precision Exams: Foundations of Technology

Precision Exams: Certificate in Biofuels



#### High school gets you ready for college and career

#### Common Career Technical Core for Transportation, Distribution & Logistics Cluster

1. Describe the nature and scope of the Transportation, Distribution and Logistics Career Cluster and the role of transportation, distribution and logistics in society and the economy.

2. Describe the application and use of new and emerging advanced techniques to provide solutions for transportation, distribution and logistics problems.

3. Describe the key operational activities required of successful transportation, distribution and logistics facilities.

4. Identify governmental policies and procedures for transportation, distribution and logistics facilities.

5. Describe transportation, distribution and logistics employee rights and responsibilities and employer's obligations concerning occupational safety and health.

6. Describe career opportunities and means to achieve those opportunities in each of the Transportation, Distribution and Logistics Career Pathways.

#### **Career Technical Student Organizations**

Career Technical Student Organizations (CTSOs) align with the 16 career clusters. Students involved in these organizations gain hands-on and real-world work experience that supplements what they learn in the classroom. The following CTSOs align with this career cluster.



**Business Professionals of America** is the leading CTSO designed for students pursuing careers in finance, business administration, management, information systems, digital communication, marketing and other business related fields.

**SkillsUSA** is a partnership of students, teachers and industry representatives working together to ensure America has a skilled workforce.

The **Technology Student Association (TSA)** is a national student organization devoted exclusively to the needs of students engaged in science, technology, engineering and mathematics (STEM).



## **Recommended Programs of Study**

Pathway	Program Name	Middle School Exploration	Cluster Courses: Introduction	Pathway Courses: Concentrator	Capstone Courses: Completer
Facility & Mobile Equipment Maintenance	Aircraft Maintenance	1603 Career Exploration	0922 Aircraft Power Plant	0923 Aircraft Airframe; 0953 Aviation; 0955 Aviation II	0998 Transportation Tech-Internship; 0999 Transportation Tech-Other
Facility & Mobile Equipment Maintenance	Automotive Technology	1603 Career Exploration	0901 Introduction to Automobiles; 0912 Automobile Technology- Comprehensive; 0918 Small Engine Mechanics	0920 Auto Tech 2; 0921 Auto Tech 3	0998 Transportation Tech-Internship; 0999 Transportation Tech-Other
Facility & Mobile Equipment Maintenance	Collision Repair	1603 Career Exploration	0933 Auto Detailing/ Reconditioning	0942 Auto Body Repair/ Refinishing-General; 0943 Particular Topics in Automotive Body Repair & Refinishing	0998 Transportation Tech-Internship; 0999 Transportation Tech-Other
Facility & Mobile Equipment Maintenance	Diesel Mechanics	1603 Career Exploration	0915 Diesel Mechanics- General	0916 Diesel Mechanics- Various Topics	0998 Transportation Tech-Internship; 0999 Transportation Tech-Other
Logistics Planning & Management Services	Global Logistics & Supply Chain Management - SREB	1603 Career Exploration	0925 Introduction to Logistics-AC	0926 Functional Areas in Logistics-AC; 0927 Global Logistics Management-AC	0928 Logistics & Supply Chain Management-AC; 0998 Transportation Tech-Internship; 0999 Transportation Tech-Other
Health, Safety & Environmental Management	Health, Safety & Environmental Management	1603 Career Exploration	1611 General Technology Education	1614 Industrial Safety/ First Aid	0897 AP Seminar; 0998 Transportation Tech-Internship; 0999 Transportation Tech-Other; 1752 AP Environmental Science
Sales & Service	Sales & Service	1603 Career Exploration	0912 Automobile Technology- Comprehensive	1805 Marketing- Transportation	0998 Transportation Tech-Internship; 0999 Transportation Tech-Other
Transportation Operations	Transportation Operations	1603 Career Exploration	0911 Introduction to Transportation	0963 Energy/Power	0998 Transportation Tech-Internship; 0999 Transportation Tech-Other
Transportation Systems/ Infrastructure Planning, Management & Regulation	Transportation Systems/ Infrastructure Planning, Management & Regulation	1603 Career Exploration	1625 Technology Systems	1695 Technology Education-Related	0998 Transportation Tech-Internship; 0999 Transportation Tech-Other
Warehousing & Distribution Center Operations	Warehousing & Distribution Center Operations	1603 Career Exploration	1623 Production Systems	1813 Warehouse Operations	1606 Work Experience; 1699 Technology Education-Other

## TRANSPORTATION, DISTRIBUTION & LOGISTICS

## Postsecondary Programs, Degrees, and Colleges

High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Heavy and Tractor- Trailer Truck Drivers	Transportation Operations	Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Certificates of less than 12 weeks	Central New Mexico Community College Eastern New Mexico University-Roswell Campus Navajo Technical University San Juan College University of New Mexico-Taos Campus
Light Truck Drivers	Transportation Operations	Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Certificates of less than 12 weeks	Central New Mexico Community College Eastern New Mexico University-Roswell Campus Navajo Technical University San Juan College University of New Mexico-Taos Campus
Automotive Service Technicians and Mechanics	Facility and Mobile Equipment Maintenance	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of at least 2 but less than 4 years Certificates of less than 1 year Certificates of less than 12 weeks	Central New Mexico Community College Clovis Community College Eastern New Mexico University-Roswell Campus Luna Community College Mesalands Community College Navajo Technical University New Mexico Junior College New Mexico State University-Alamogordo New Mexico State University-Alamogordo New Mexico State University-Dona Ana New Mexico State University-Grants San Juan College Santa Fe Community College Southeast New Mexico College University of New Mexico-Gallup Campus University of New Mexico-Valencia County Campus
Bus and Truck Mechanics and Diesel Engine Specialists	Facility and Mobile Equipment Maintenance	Associate's degree Certificates of at least 1 but less than 2 years Certificates of at least 2 but less than 4 years	Central New Mexico Community College San Juan College
Billing and Posting Clerks	Sales and Service	*	
Industrial Truck and Tractor Operators	Transportation Operations	*	

## TRANSPORTATION, DISTRIBUTION & LOGISTICS

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High Value Occupation	Pathway	Degrees Awarded	Postsecondary Institution
Logisticians	Logistics Planning and Management Services	Associate's degree Bachelor's degree Certificates of at least 1 but less than 2 years Certificates of at least 12 weeks but less than 1 year Certificates of less than 1 year Doctor's degree - research/ scholarship Master's degree Post-master's certificate	Central New Mexico Community College Clovis Community College Eastern New Mexico University Ruidoso Branch Community College Eastern New Mexico University-Main Campus Eastern New Mexico University-Roswell Campus Institute of American Indian and Alaska Native Culture and Arts Development Luna Community College Mesalands Community College New Mexico Highlands University New Mexico Institute of Mining and Technology New Mexico Junior College New Mexico State University-Dona Ana New Mexico State University-Main Campus Northern New Mexico College San Juan College Santa Fe Community College Southeast New Mexico College Southeast New Mexico College Southestern Indian Polytechnic Institute University of New Mexico-Los Alamos Campus University of New Mexico-Los Alamos Campus University of New Mexico-Taos Campus University of New Mexico-Valencia County Campus University of New Mexico-Valencia County Campus
Mobile Heavy Equipment Mechanics, Except Engines	Facility and Mobile Equipment Maintenance	*	
Automotive Body and Related Repairers	Facility and Mobile Equipment Maintenance	Associate's degree Certificates of at least 1 but less than 2 years	Luna Community College San Juan College University of New Mexico-Gallup Campus
Dispatchers, Except Police, Fire, and Ambulance	Logistics Planning and Management Services	*	

\* There are no postsecondary offerings for this occupation

### **Career Readiness Benchmarks**

#### Workforce Certifications for the Transportation, Distribution & Logistics Cluster:

Note: Students successfully exiting a course of study in this cluster may be eligible to earn some or all of these certifications.

NATEF Credential

Precision Exams: Customer Service

Automotive Service Excellence (ASE) Certifications: Automotive Steering and Suspension

Automotive Service Excellence (ASE) Certifications: Automotive Brakes

Automotive Service Excellence (ASE) Certifications: Electrical

Automotive Service Excellence (ASE) Certifications: Engine Performance

# RESOURCES AND TOOLS

## **ADDITIONAL ONLINE RESOURCES**

Support career readiness with posters you can print and display for your students. Use these **posters to increase engagement, inform parents/guardians, and teachers.** Displaying information about the 16 Career Clusters allow students to explore the top-five high value careers for each cluster in New Mexico, the core skills needed for occupations in each cluster and the career pathways and occupations that exist within each cluster.

#### Find more resources to share!

Scan the QR code to download posters on every Career Cluster and help students discover high-value careers in New Mexcio





Find these resources and more at careerpathways-nm.com/guide

## GUIDED CAREER EXPLORATION CURRICULUM

Educators may access the Career Exploration curriculum to support 6-12th grade students on their career planning journey.

Career exploration lessons are designed to be integrated into everyday learning alongside your core subject areas. Core subjects include English Language Arts (ELA), Math, Science, Social Studies, and Technology.

Lessons are best completed in class with other students. Each level corresponds roughly to grades 6-12 (i.e., Level 1 = Grade 6, Level 2 = Grade 7, etc.). Lessons can be delivered at any level that best supports student learning.

#### There are four types of Career Exploration lessons:

**Personal Discovery:** Students explore their personal interests, values and abilities.

**Career Awareness:** Students learn about various high-value career opportunities.

**Career Evaluation:** Students analyze regional or state labor market data to learn which jobs have the greatest opportunities.



Each lesson includes a suggested grade level, lesson number, description, and core subjects in which the lesson can be taught. Every lesson contains the following components:

- Career exploration area
- Core subject and standard
- Materials and supplies
- Overview of the lesson
- Summary of activities
- Launch (lesson hook)
- Explore (central part of lesson)
- Summary (closure of lesson)

**Career Preparation:** Students discover the education and training needed for high-interest careers and learn about pathways available to reach their career goals.



## CAREER EXPLORATION IN THE CLASSROOM

**Integration with Core Subjects:** This curriculum is designed to be seamlessly integrated into everyday learning alongside core subject areas such as English Language Arts (ELA), Math, Science, Social Studies, and Technology. Educators can incorporate career exploration lessons into their existing lesson plans, ensuring that students see the relevance of career preparation within their education.

**Customization for Different Levels:** The curriculum offers different levels (corresponding to different grade levels); but completion of lower levels is recommended, not required. Educators have the flexibility to choose the level that best suits their students' needs and learning readiness.

**Four Types of Lessons:** The curriculum offers four types of career exploration lessons, which educators can use based on their students' current needs and interests:

**Personal Discovery:** These lessons help students explore their personal interests, values, and abilities, which is crucial for self-awareness and understanding their own motivations.

**Career Awareness:** Students learn about various high-value career opportunities, broadening their understanding of potential career paths.

**Career Evaluation:** Students analyze regional or state labor market data to identify jobs with the greatest opportunities. This is valuable for making informed decisions about careers in demand.

**Career Preparation:** These lessons guide students in discovering the education and training required for high-interest careers, helping them understand the pathways available to achieve their career goals.

**Financial Literacy and STEM Lessons:** The curriculum also includes lessons related to financial literacy and Science, Technology, Engineering, and Mathematics (STEM), providing a holistic approach to career exploration and readiness.

**Lesson Components:** Each lesson in the curriculum comes with a well-structured set of components, including a clear overview, materials needed, activities, and a summary. This structure makes it easy for educators to follow and deliver engaging lessons.

**Career Exploration Areas:** The curriculum provides a dedicated area for career exploration, allowing students to focus on their personal and career-related development.

**My Career Page:** The inclusion of a "My Career Page" allow students create a personalized portfolio of their career exploration journey.

**Customization and Adaptation:** Educators can adapt the lessons to fit their specific classroom context and the needs of their students. They can emphasize particular core subjects or tailor activities to suit their class dynamics.

**Collaborative Learning:** Many lessons are designed to be completed in a classroom with other students. Educators can encourage collaborative learning, discussions, and group activities to enhance the students' understanding of different career aspects.

Accessibility and Flexibility: Lessons are available on P2C to access at any time, offering flexibility to educators and students. Lessons can be used in class or as homework assignments, depending on the learning environment.

# P2C Career Explorer

Careers2Communities (C2C) seeks to improve outcomes for all students. The program, funded by **Expanding Access to Well-Rounded Courses Demonstration Grants Program**, will enhance college and career readiness. Pathway2Careers<sup>™</sup> (P2C) is one of the solutions made available through C2C. P2C is available to ALL New Mexico schools at no cost.

## Just 3 simple steps to get started



## **REQUEST ACCESS**

Complete the 'Get Started' Form to receive your personalized P2C District invite code and P2C student invite code at *careers2communities.com.* 

## CREATE THE DISTRICT ACCOUNT

Create your account at engage.pathway2careers.com and when prompted use your administrative invite code.





## **INVITE STUDENTS**

Share the student invite code and allow students to create an account at *engage.pathway2careers.com* to unlock P2C Career Explorer tools and resources.

Get started at careers2communities.com

## ONLINE PROFESSIONAL DEVELOPMENT

Educators play a vital role in creating a culture of career exploration for their students. By exposing students to a variety of careers, providing them with opportunities to learn about their own interests and skills, and helping them to develop the skills they need to succeed in the workforce, educators can help students to make informed career decisions and prepare for a successful future. Below are resources shown to be effective for educators who wish to support students' college and career readiness.

When	ATHWAY 2 CAREE education becomes relevant, learne areers Educators See	
Documents	Courses Docs Members 📄 Albums Photos	1. Uplaad Files 🕥 Create Folder
NAME *	MODIFIED *	VISIBILITY *

P2C Educate is an online, collaborative platform that provides

educators with access to resources, self-paced professional development courses, and opportunities to connect with other educators.



#### Explore Professional Development offerings at your own pace

P2C Educate offers a variety of self-paced, asynchronous learning courses on a range of topics, including Educator Effectiveness, Career Exploration and Readiness, P2C Curriculum Support, and Employability Skills. Courses include interactive activities, reflection questions, and knowledge checks. Upon successful completion of the knowledge checks, participants earn a personalized certificate of completion.

#### Connect with your P2C peers

P2C Educate also encourages connections with other educators via discussion forums, resource exchange, and more through nationwide connections or state-specific subgroups. This provides educators with opportunities to share best practices, collaborate on projects, and learn from one another.

#### **Monthly Master Classes**

In addition to self-paced courses, P2C Educate also provides educators with access to free P2C resources and Monthly Master Classes. Monthly Master Classes are live Professional Development sessions that are recorded and made available on the P2C Educate platform for later viewing.

#### Benefits of P2C Educate for Educators

P2C Educate offers a number of benefits for educators, including:

- Convenience: Educators can access P2C Educate from anywhere, at any time.
- Flexibility: P2C Educate offers self-paced courses, allowing educators to learn at their own convenience.
- Community: P2C Educate provides opportunities for educators to connect with other educators and share best practices.

#### Need access to P2C Educate? All New Mexico Educators have free access!



Scan the QR code or visit p2c.org/get-started

## INTEREST MATCHER ASSESSMENT

The Interest Matcher is helpful for learning work-related interests, preferences, and motivations. This popular model, the Holland's Framework, identifies six dimensions, or 'interests', that guides learners in identifying preferences and understanding what types of careers can satisfy various interests.

#### Realistic- The "Doers"

People with Realistic interests like work activities that include practical, hands-on problems and solutions. They enjoy dealing with plants, animals, and real-world materials like wood, tools, and machinery. They often enjoy outside work. Often people with Realistic interests do not like occupations that mainly involve doing paperwork or working closely with others. Famous realists: NASCAR driver Danica Patrick, TV carpenter Norm Abram, wildlife expert Steve Irwin, and multi-talented athlete Jim Thorpe.

#### Investigative - The "Thinkers"

People with Investigative interests like work activities that have to do with ideas and thinking more than with physical activity. They prefer to search for facts and figure out problems mentally rather than to persuade or lead people. Prominent investigators: astrophysicist Neil deGrasse Tyson, primatologist Jane Goodall, mathematician/computer scientist Grace Murray Hopper, and neuroscientist Ben Carson.

#### Social - The "Helpers"

People with Social interests like work activities that assist others and promote learning and personal development. They prefer to communicate more than to work with objects, machines, or data. They like to teach, give advice, help, or otherwise be of service to people. Famous helpers: educator Booker T. Washington, mental health care reformer Dorothea Dix, TV psychologist Phil McGraw, and civil rights leader Martin Luther King Jr.

#### Enterprising - The "Persuaders"

People with Enterprising interests like work activities that have to do with starting up and carrying out projects, especially business ventures. They like persuading and leading people and making decisions. They enjoy taking risks for profit. These people prefer action rather than thought. Prominent persuaders: TV mogul Oprah Winfrey, business magnate Jeff Bezos, U.S. Senator Marco Rubio, and Facebook co-founder Mark Zuckerberg.

#### Artistic - The "Creators"

People with Artistic interests like work activities that deal with the artistic side of things, such as forms, designs, and patterns. They like self-expression in their work. They prefer settings where work can be done without following a clear set of rules. Well-known artists: painter/sculptor Leonardo da Vinci, actress Halle Berry, writer J.K. Rowling, and singers Lady Gaga and Tony Bennett.

#### Conventional - The "Organizers"

People with Conventional interests follow procedures and maintain accurate written and numerical business records. They prefer working in structured settings where roles and tasks are clearly defined. Well-known organizers: businessman J.C. Penney, Supreme Court Justice Sandra Day O'Connor, and professional organizer Alejandra Costello.



The P2C Career Explorer Interest Matcher is compatible with Holland's (1985a) Theory of Vocational Personality, one of the most widely accepted approaches to vocational choice. Information for Interest Areas is extracted from the O\*NET Career Exploration Tools owned by the U.S. Department of Labor, Employment Training Administration (DOL/ETA).

## COMMUNITIES OF BEST PRACTICE

The New Mexico Public Education Department (NMPED) strives to deliver best practices to New Mexico. Pathway2Careers, in partnership with the NMPED, delivers quality resources, established collaborative environments, and customized support.

#### New Mexico Early College Resource Center

Early College High Schools are an innovative approach that blends high school and college. These research-based programs allow students to graduate from high school while simultaneously earning college credits toward a degree and/or industry-recognized certification. Early College High Schools give students the launch pad they need to succeed while building the workforce and economy of the surrounding community.



echs-nm.com



schoolcounselors-nm.com

#### **New Mexico School Counselors**

A community of school counselors are encouraged to collaborate on information and resources that support best practices in school counseling that are anchored in three key domains of development: academic, career, and social/emotional.

#### **New Mexico Career Pathways**

Close the gap between education and the workplace with detailed information about the high-value careers throughout New Mexico. Educators can navigate complex data in an engaging and digestible way to offer personalized pathways for students.



careerpathways-nm.com

N	OTES:

## **CTE Regions and Priorities**

New Mexico requires a regional-association organizational structure where Career Technical Education funding decisions for secondary and postsecondary institutions are prioritized by all members of the regional, workforce-aligned association. According to the Strengthening Career and Technical Education in the 21st Century Act ("Perkins V" Act), all CTE grant -funded programs of study in New Mexico must meet criteria related to size, scope, and quality and be aligned to in-demand industry sectors in order to be considered for CTE grant funding, or be designed to meet local education or economic needs.



Region	Priorities		Region	Priorities
А	Human Health Care; IT/STEM; Skilled Trades		Н	Skilled Construction; Trades; Healthcare Education
В	Healthcare; Skilled Trades; STEM/IT-Computer Science		1	Healthcare; Agriculture; Information Technology (IT);
С	Agriculture; Natural Resources; Skilled Trades			Manufacturing
D	Education; Healthcare; Hospitality/Tourism; Skilled Trades; STEM/IT-Computer Science			Agriculture, Food, & Natural Resources Architecture and Construction Arts, Audio/Video Technology, & Communications Education and Training Health Science Information Technology (IT) STEM-Aerospace Manufacturing Transportation, Logistics, &
E	Manufacturing; Skilled Trades; Healthcare; Information Technology (IT)		J	
	Agriculture, Food, & Natural Resources; Architecture			Distribution
G	and Construction; Arts, Audio/Video Technology, & Communications; Education; Health Science;		К	Skilled Trades; Healthcare; Agriculture; Hospitality; STEM
	Hospitality/ Tourism; Information Technology (IT)			

The New Mexico regional priorities are subject to change. For more information about the current priorities please contact the New Mexico Pulic Education Department, College and Career Readiness Bureau at PED.CCRB@state.nm.us or visit webnew.ped.state.nm.us.

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