

# Exploring Math & Science Careers in Wyoming

## Introduction

As a result of the economic and technological changes associated with moving into the 21st Century, occupations requiring math and science skills have shown substantial growth over the past decade. Not only are these occupations appealing for their typically high wages but also for their ability to utilize state-of-the-art technology and cutting-edge innovations.

Tomorrow's workers need to take advantage of training and educational opportunities that will lead to a career in math and science occupations. Certification by software and hardware providers either alone or in combination with some postsecondary education often meets the training and educational requirements for some occupations. However, most math and science occupations require at least a bachelor's degree or higher.

Women, especially, need to consider careers in math and science occupations as their employment in these areas has lagged behind that of men. In addition, women should strive to move beyond supporting roles, such as technologists and technicians, by choosing career paths that end in doctoral or first professional degrees.

## Highest Paying Math & Science Occupations

**Wyoming Statewide Math and Science Occupations by Median Annual Wage**

Standard Occupational Classification		Median Annual Wage
Code	Title	Wage
29-1063	Internists, general	\$132,080
29-1061	Anesthesiologists	\$130,354
29-1021	Dentists, general	\$128,045
29-1062	Family and general practitioners	\$119,621
29-1081	Podiatrists	\$105,955
29-1065	Pediatricians, general	\$97,240
25-1063	Economics teachers, postsecondary	\$87,960
29-1041	Optometrists	\$87,838
25-1032	Engineering teachers, postsecondary	\$83,080
17-2041	Chemical engineers	\$77,022
29-1051	Pharmacists	\$76,690
17-2112	Industrial engineers	\$70,949
29-1011	Chiropractors	\$70,658
25-1052	Chemistry teachers, postsecondary	\$68,990
25-1041	Agricultural sciences teachers, postsecondary	\$68,400
25-1042	Biological science teachers, postsecondary	\$67,960
17-2071	Electrical engineers	\$66,810
41-3031	Securities & commodities sales agents	\$65,478
19-2042	Geoscientists, except hydrologists and geographers	\$65,062
25-1065	Political science teachers, postsecondary	\$64,870

## For More Info

For more information about occupations in math and science, visit the following websites:

**Research & Planning** <http://doe.state.wy.us/ANSWERS/>  
**America's Career Info Net** <http://www.acinet.org/acinet/>  
**IPEDS College Opportunities On-line**  
<http://nces.ed.gov/ipeds/cool/>

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<http://doe.state.wy.us/LMI/>



# Educational Requirements of Math & Science Occupations

## On-the-Job Training

Payroll & timekeeping clerks (short-term)  
 Tellers (short-term)  
 Bookkeeping & accounting clerks (moderate-term)  
 Pharmacy technicians (moderate-term)  
 Tax preparers (moderate-term)  
 Cabinetmakers & carpenters (long-term)  
 Electricians (long-term)  
 Fire fighters (long-term)  
 Agricultural inspectors (experience in related occ.)  
 Fire inspectors (experience in related occ.)

## Vocational Training

Avionics technicians  
 Commercial pilots  
 Drafters  
 EMTs & paramedics  
 Jewelers  
 Licensed practical nurses  
 Massage therapists  
 Real estate appraisers  
 Respiratory therapy technicians  
 Surgical technologists

## Associate's Degree

Computer support specialists  
 Dental hygienists  
 Diagnostic medical sonographers  
 Engineering technicians  
 Life, physical, & social science techs  
 Medical & clinical lab technicians  
 Radiation therapists  
 Registered nurses  
 Respiratory therapists  
 Veterinary technicians

## Bachelor's Degree

Accountants & auditors  
 Airline pilots & copilots  
 Architects  
 Biological scientists  
 Chemists  
 Economists  
 Engineers  
 Loan officers  
 Occupational therapists  
 Surveyors

## Master's Degree

Anthropologists  
 Audiologists  
 Geographers  
 Hydrologists  
 Market research analysts  
 Physical therapists  
 Psychologists  
 Speech pathologists  
 Statisticians  
 Urban & regional planners

## Doctoral Degree

Agricultural sciences teachers, postsecondary  
 Biological science teachers, postsecondary  
 Chemistry teachers, postsecondary  
 Clinical, counseling, & school psychologists  
 Computer science teachers, postsecondary  
 Economics teachers, postsecondary  
 Engineering teachers, postsecondary  
 Mathematical science teachers, postsecondary  
 Nursing instructors & teachers, postsecondary  
 Sociology teachers, postsecondary

## 1st Pro. Degree

Anesthesiologists  
 Chiropractors  
 Dentists  
 Family practitioners  
 Internists  
 Optometrists  
 Pediatricians  
 Pharmacists  
 Podiatrists  
 Veterinarians

## Growing Math & Science Occupations

### Wyoming Statewide Math and Science Occupations With the Highest Projected Employment Growth

Standard Occupational Classification Code	Title	Percent Change
15-1031	Computer software engineers, applications	61.0
15-1081	Network systems and data communications analysts	57.2
29-2056	Veterinary technologists and technicians	51.9
19-3092	Geographers	50.0
29-1071	Physician assistants	49.2
29-1051	Pharmacists	48.8
29-2021	Dental hygienists	48.1
29-1126	Respiratory therapists	46.7
17-2081	Environmental engineers	46.0
15-1032	Computer software engineers, systems software	45.8
29-2054	Respiratory therapy technicians	43.2
29-2052	Pharmacy technicians	42.6
29-1131	Veterinarians	41.6
29-1011	Chiropractors	40.0
29-1123	Physical therapists	39.8
13-2082	Tax preparers	39.7
15-1051	Computer systems analysts	38.5
13-2052	Personal financial advisors	38.3
19-2041	Environmental scientists and specialists	37.3
29-2034	Radiologic technologists and technicians	36.9

## Women in Math & Science

- Women comprise 46.5% of the total U.S. labor force.
- Only 1 out of 10 employed engineers is a woman.
- Women represent just 20.3% of network and computer systems administrators and 26.7% of computer programmers.
- Among life sciences, women make up 45.2% of all employed biological scientists and 53.2% of all medical scientists.
- Nearly two-thirds of all employed psychologists are women.
- 98.8% of dental hygienists are women, but only 22.0% of dentists.

Source: Current Population Survey, 2004