



## Computer and mathematical occupations

This occupational group includes computer and information analysts, software developers and programmers, database and systems administrators, computer support specialists, actuaries, mathematicians, statisticians, operations research analysts, and mathematical technicians.

## Cognitive and mental requirements

The qualifications that workers need to use judgment, make decisions, interact with others, and adapt to changes in a job.

In 2021, basic people skills were required for 4.3 percent of computer and mathematical workers, and more than basic people skills were required for 95.7 percent.

**Table 1. Percentage of computer and mathematical workers with cognitive and mental requirements, 2021**

Requirement	Yes	No
<b>Pace: Pause control</b>	95.3	4.7
<b>Interaction with the general public</b>	51.3	48.7
<b>Telework</b>	47.6	52.4
<b>Work review: Supervising others</b>	12.9	87.1
<b>Work review: Presence of supervisor</b>	58.8	41.2

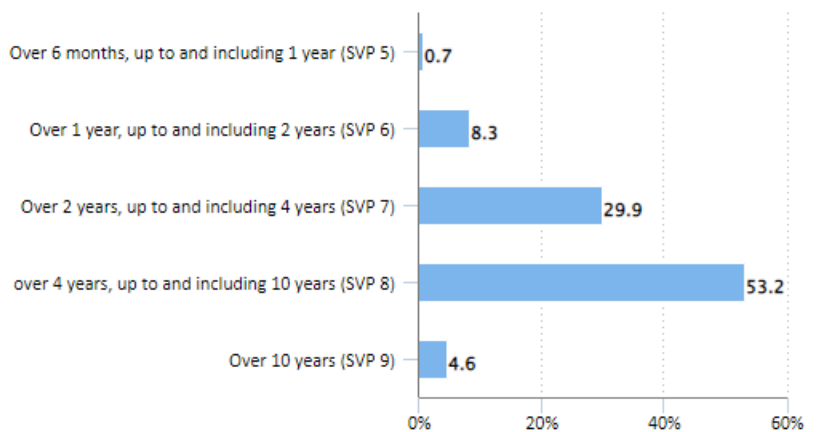
Source: U.S. Bureau of Labor Statistics, Occupational Requirements Survey

## Education, training, and experience requirements

The minimum level of formal education required, credentials necessary, on-the-job training, and prior work experience necessary for average performance in selected jobs.

In 2021, 82.7 percent of computer and mathematical workers were required to have prior work experience and on-the-job training was required for 63.0 percent.

**Chart 1. Percentage of computer and mathematical workers by specific preparation time (SVP) level, 2021**

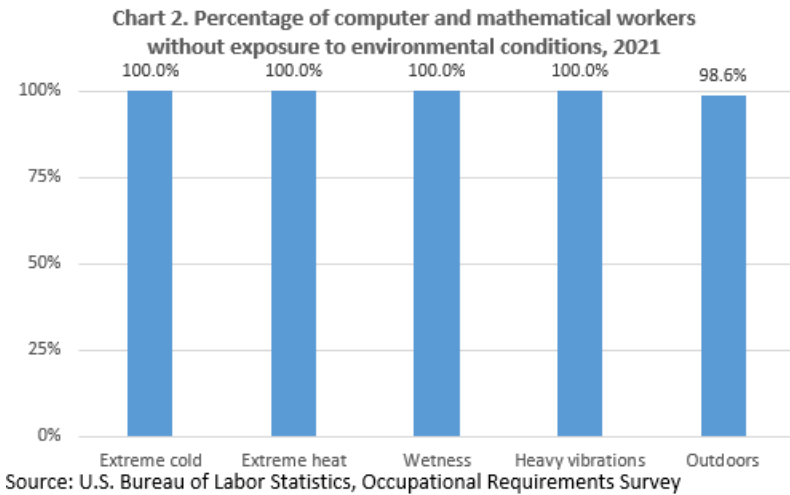


Source: U.S. Bureau of Labor Statistics, Occupational Requirements Survey

## Environmental conditions

The various tangible or concrete hazards or difficulties that are in the vicinity of where jobs' critical tasks are performed.

In 2021, 33.8 percent of computer and mathematical workers were exposed to quiet noise, and 66.2 percent were exposed to moderate noise. Nearly all, 99.3 percent, of computer and mathematical workers did not use personal protective equipment to mitigate noise exposure, and 0.7 percent did use personal protective equipment.

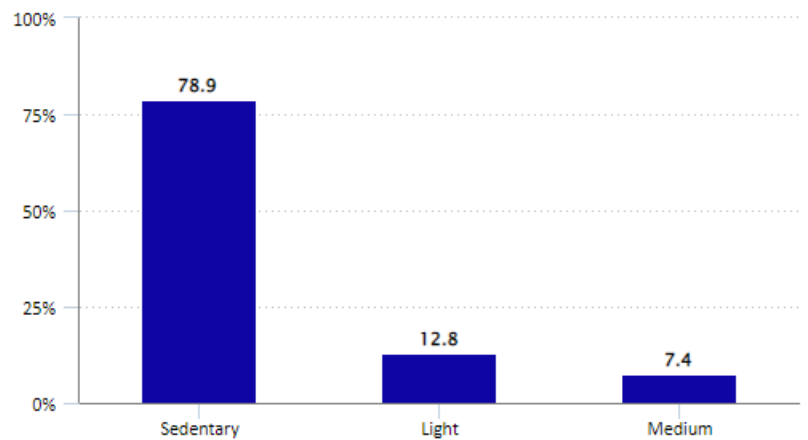


## Physical demands

Refer to the physical activities required to perform tasks in a job. The presence and, in some cases, duration of these activities are published.

In 2021, 90.8 percent of computer and mathematical workers had the choice of sitting or standing to perform critical tasks. Driving was required for 9.2 percent of workers and 5.6 percent were required to climb structure related ramps or stairs.

**Chart 3. Percentage of computer and mathematical workers by strength level requirements, 2021**



**Table 2. Percentage of computer and mathematical workers with physical demands, 2021**

Requirement	Yes	No
Choice of sitting or standing	90.8	9.2
Driving	9.2	90.8
Climbing structure-related ramps or stairs	5.6	94.4

Source: U.S. Bureau of Labor Statistics, Occupational Requirements Survey