

Job Skills Most Needed Across All Occupations

Job Skills Overview

Job skills are personal abilities that help workers carry out job-related tasks. However, depending on the occupation, the required skills can be very different. For instance, construction workers need a unique set of skills different from accountants, teachers, or production workers.

Some of the most important job skills come as second nature to employees. The ability to listen well, show up to work on time, to take and apply instructions, and to maintain focus for long periods of time are critical to success in almost any workplace. Basic phone courtesy and computer and e-mail skills fall in this category. Most of the time, these sorts of skills are assumed: that is, employers expect employees to have them. People who struggle with these basic skills or job requirements can take part in what is known as "skills workshops." These sorts of workshops are often held at local job centers, community colleges or non-profit centers. These types of skills are not the focus here.

Rather the focus is on the skills that employers list as "required" or "desired" in position announcements and specific to the sort of work at issue. A corporate manager, for instance, may need to demonstrate meeting leadership skills and lawyers will need to show that they are persuasive. Specialized job skills like this can be thought of as adjectives and short phrases describing how successful employees do their jobs.

Fortunately, these required skills can be summarized across different occupational groups. Using data compiled from the Occupational Information Network (ONET), skills can be categorized into four useful groups that can aid in training and career planning and transitions. The four types of job skills discussed here are: Knowledge Areas, General Work Activities, Detail Work Activities, and Tools & Technologies.

A Knowledge Area is a key educational or experience requirement for an occupation (e.g. Computers and Electronics).

General Work Activities are types of job behaviors that occur across multiple occupations (e.g. interacting with computers).

Detailed Work Activities are types of specific job behaviors or duties particular to an occupation (e.g. use computers to enter, access or retrieve data).

Tools & Technologies are machines, equipment, tools, and information technologies that one could be expected to use in a particular occupation (e.g. Microsoft Access).

In many occupations, prior experience can itself be an essential job skill. People who have held similar jobs in the past are often uniquely qualified to continue, or to expand into new occupations. Many essential at-work skills are transferable to what are called related occupations, which mean that they can easily be applied to a variety of different jobs.

Knowledge Areas

(Total of 33 – all listed below)

Nearly 750 occupations were analyzed and the knowledge area, “English Language,” was found needed in 82 percent of all occupations (606/743).

Knowledge Areas are key educational or experience requirements for an occupation (e.g. Computers and Electronics).

Knowledge Area	Occupations Requiring	Pct.
English Language	606	82%
Customer and Personal Service	537	72%
Mathematics	491	66%
Administration and Management	485	65%
Education and Training	475	64%
Computers and Electronics	441	59%
Public Safety and Security	398	54%
Clerical	378	51%
Mechanical	281	38%
Production and Processing	278	37%
Law and Government	262	35%
Psychology	222	30%
Personnel and Human Resources	218	29%
Engineering and Technology	216	29%
Communications and Media	197	27%
Sales and Marketing	191	26%
Design	190	26%
Transportation	161	22%
Economics and Accounting	152	20%
Chemistry	142	19%
Physics	134	18%
Building and Construction	125	17%
Sociology and Anthropology	116	16%
Telecommunications	111	15%
Biology	95	13%
Medicine and Dentistry	89	12%
Geography	84	11%
Therapy and Counseling	83	11%
Philosophy and Theology	57	8%
Food Production	40	5%
History and Archeology	37	5%
Fine Arts	37	5%
Foreign Language	24	3%

Source: CWIA analysis of Occupation Information Network (O*NET) data.

General Work Activities

(Total of 41 – all listed below)

743 occupations were analyzed and the general work activity, "Getting Information," was found to be rated as **important** in 64 percent of all occupations (472/743).

General Work Activities are types of job behaviors that occur across multiple occupations (e.g. interacting with computers).

General Work Activity	Occupations Requiring	Pct.
Getting Information	472	64%
Communicating with Supervisors, Peers, or Subordinates	324	44%
Making Decisions and Solving Problems	304	41%
Interacting With Computers	256	34%
Identifying Objects, Actions, and Events	232	31%
Updating and Using Relevant Knowledge	223	30%
Establishing and Maintaining Interpersonal Relationships	189	25%
Documenting/Recording Information	177	24%
Organizing, Planning, and Prioritizing Work	171	23%
Processing Information	146	20%
Inspecting Equipment, Structures, or Material	135	18%
Evaluating Information to Determine Compliance with Standards	131	18%
Monitor Processes, Materials, or Surroundings	124	17%
Analyzing Data or Information	118	16%
Thinking Creatively	116	16%
Performing for or Working Directly with the Public	108	15%
Communicating with Persons Outside Organization	102	14%
Controlling Machines and Processes	97	13%
Handling and Moving Objects	93	13%
Interpreting the Meaning of Information for Others	92	12%
Training and Teaching Others	87	12%
Assisting and Caring for Others	80	11%
Performing General Physical Activities	73	10%
Operating Vehicles, Mechanized Devices, or Equipment	62	8%
Developing Objectives and Strategies	45	6%
Resolving Conflicts and Negotiating with Others	44	6%
Coaching and Developing Others	44	6%
Developing and Building Teams	38	5%
Judging the Qualities of Things, Services, or People	37	5%
Coordinating the Work and Activities of Others	36	5%

General Work Activity	Occupations Requiring	Pct.
Scheduling Work and Activities	36	5%
Repairing and Maintaining Mechanical Equipment	32	4%
Guiding, Directing, and Motivating Subordinates	30	4%
Performing Administrative Activities	18	2%
Selling or Influencing Others	17	2%
Drafting, Laying Out, and Specifying Technical Devices, Parts, and Equipment	17	2%
Provide Consultation and Advice to Others	16	2%
Repairing and Maintaining Electronic Equipment	14	2%
Estimating the Quantifiable Characteristics of Products, Events, or Information	12	2%
Monitoring and Controlling Resources	5	1%
Staffing Organizational Units	2	0%

Source: CWIA analysis of Occupation Information Network (O*NET) data.

Detailed Work Activities**(Total of 2,001 - top 50 listed below)**

743 occupations were analyzed and the detailed work activity, "record operational or production data," was found needed in 10 percent of all occupations (73/743).

Detailed Work Activities are types of specific job behaviors or duties particular to an occupation (e.g. use computers to enter, access or retrieve data).

Detailed Work Activity	Occupations Requiring	Pct.
Record operational or production data.	73	10%
Order materials, supplies, or equipment.	55	7%
Clean production equipment.	48	6%
Maintain inventories of materials, equipment, or products.	48	6%
Order instructional or library materials or equipment.	45	6%
Administer tests to assess educational needs or progress.	44	6%
Attend training sessions or professional meetings to develop or maintain professional knowledge.	44	6%
Evaluate student work.	43	6%
Develop instructional objectives.	43	6%
Serve on institutional or departmental committees.	42	6%
Supervise employees.	41	6%
Maintain student records.	41	6%
Prepare tests.	40	5%
Advise students on academic or career matters.	40	5%
Write grant proposals.	39	5%
Load materials into production equipment.	38	5%
Measure dimensions of completed products or workpieces to verify conformance to specifications.	38	5%
Supervise student research or internship work.	38	5%
Write articles, books or other original materials in area of expertise.	38	5%
Explain regulations, policies, or procedures.	37	5%
Promote educational institutions or programs.	37	5%
Plan community programs or activities for the general public.	37	5%
Operate cranes, hoists, or other moving or lifting equipment.	36	5%
Stay informed about current developments in field of specialization.	36	5%
Select educational materials or equipment.	36	5%
Evaluate effectiveness of educational programs.	36	5%
Research topics in area of expertise.	36	5%
Maintain operational records.	35	5%
Maintain production or processing equipment.	35	5%
Develop instructional materials.	35	5%
Perform student enrollment or registration activities.	35	5%
Advise educators on curricula, instructional methods, or policies.	35	5%
Read work orders or other instructions to determine product specifications or materials requirements.	34	5%
Sell products or services.	33	4%
Adjust equipment to ensure optimal performance.	33	4%
Monitor equipment operation to ensure proper functioning.	33	4%
Mount attachments or tools onto production equipment.	33	4%

Detailed Work Activity	Occupations Requiring	Pct.
Compile specialized bibliographies or lists of materials.	33	4%
Direct department activities.	33	4%
Review blueprints or other instructions to determine operational methods or sequences.	32	4%
Guide class discussions.	32	4%
Disassemble equipment for maintenance or repair.	31	4%
Mount materials or workpieces onto production equipment.	31	4%
Prepare financial documents, reports, or budgets.	30	4%
Operate grinding equipment.	30	4%
Replace worn equipment components.	30	4%
Repair production equipment or tools.	28	4%
Replace worn, damaged, or defective mechanical parts.	28	4%
Prepare operational reports.	28	4%
Prepare scientific or technical reports or presentations.	28	4%

Source: CWIA analysis of the Occupation Information (O*NET) data.

Tools & Technologies

(Total of 3,884 - top 50 listed below)

743 occupations were analyzed and the tool/technology, "spreadsheet software," was found needed in 77 percent of all occupations (569/743).

Tools & Technologies are machines, equipment, tools, and information technologies that one could be expected to use in a particular occupation (e.g. Microsoft Access).

Tool or Technology	Occupations Requiring	Pct.
Spreadsheet software	569	77%
Word processing software	536	72%
Office suite software	501	67%
Data base user interface and query software	488	66%
Personal computers	462	62%
Electronic mail software	435	59%
Desktop computers	382	51%
Notebook computers	374	50%
Presentation software	368	50%
Internet browser software	329	44%
Enterprise resource planning ERP software	230	31%
Analytical or scientific software	219	29%
Project management software	208	28%
Graphics or photo imaging software	206	28%
Operating system software	190	26%
Scanners	176	24%
Computer aided design CAD software	170	23%
Laser printers	166	22%
Tablet computers	164	22%
Calendar and scheduling software	161	22%
Screwdrivers	151	20%
Accounting software	148	20%
Document management software	147	20%
Photocopiers	139	19%
Digital cameras	138	19%
Special purpose telephones	136	18%
Desktop publishing software	135	18%
Laser fax machine	129	17%
Tape measures	129	17%
Power drills	122	16%
Two-way radios	119	16%
Web page creation and editing software	115	15%
Adjustable wrenches	114	15%
Development environment software	114	15%
Medical software	113	15%

Tool or Technology	Occupations Requiring	Pct.
Power saws	113	15%
Inventory management software	107	14%
Object or component oriented development software	106	14%
Forklifts	105	14%
Digital camcorders or video cameras	102	14%
Information retrieval or search software	101	14%
Utility knives	101	14%
Portable data input terminals	98	13%
Video creation and editing software	94	13%
Map creation software	94	13%
Calipers	94	13%
Safety glasses	93	13%
Customer relationship management CRM software	92	12%
Hoists	91	12%
Hammers	89	12%
Power saws	113	15%

Source: CWIA analysis of Occupation Information Network (O*NET) data.