Exploring Green Occupations Guidance Document

Basic Skills[1]

Basic skills are developed capacities that facilitate learning or the more rapid acquisition of knowledge.

Active Listening - Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

Mathematics - Using mathematics to solve problems.

Reading Comprehension - Understanding written sentences and paragraphs in work-related documents.

Science - Using scientific rules and methods to solve problems.

Speaking - Talking to others to convey information effectively.

Writing - Communicating effectively in writing as appropriate for the needs of the audience.

Active Learning - Understanding the implications of new information for both current and future problem-solving and decision-making.

Critical Thinking - Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.

Learning Strategies - Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.

Monitoring - Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.

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[1] The O*NET® Content Model at O*NET Resource Center (onetcenter.org)

Cross-Functional Skills[2]

Cross-functional skills are developed capacities that facilitate performance of activities that occur across jobs.

Complex Problem Solving - Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

Management of Financial Resources - Determining how money will be spent to get the work done, and accounting for these expenditures.

Management of Material Resources - Obtaining and seeing to the appropriate use of equipment, facilities, and materials needed to do certain work.

Management of Personnel Resources - Motivating, developing, and directing people as they work, identifying the best people for the job

Time Management - Managing one's own time and the time of others.

Coordination - Adjusting actions in relation to others' actions.

Instructing - Teaching others how to do something.

Negotiation - Bringing others together and trying to reconcile differences.

Persuasion - Persuading others to change their minds or behavior.

Service Orientation - Actively looking for ways to help people.

Social Perceptiveness - Being aware of others' reactions and understanding why they react as they do.

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[2] The O*NET® Content Model at O*NET Resource Center (onetcenter.org)

Knowledge[3]

Knowledge is organized sets of principles and facts applying in general domains.

Administration and Management - Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.

Administrative - Knowledge of administrative and office procedures and systems such as word processing, managing files and records, stenography and transcription, designing forms, and workplace terminology.

Customer and Personal Service - Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.

Economics and Accounting - Knowledge of economic and accounting principles and practices, the financial markets, banking, and the analysis and reporting of financial data.

Personnel and Human Resources - Knowledge of principles and procedures for personnel recruitment, selection, training, compensation and benefits, labor relations and negotiation, and personnel information systems.

Sales and Marketing - Knowledge of principles and methods for showing, promoting, and selling products or services. This includes marketing strategy and tactics, product demonstration, sales techniques, and sales control systems.

Communications and Media - Knowledge of media production, communication, and dissemination techniques and methods. This includes alternative ways to inform and entertain via written, oral, and visual media.

Telecommunications - Knowledge of transmission, broadcasting, switching, control, and operation of telecommunications systems.

Building and Construction - Knowledge of materials, methods, and the tools involved in the construction or repair of houses, buildings, or other structures such as highways and roads.

Computers and Electronics - Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.

Design - Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.

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[3] The O*NET® Content Model at O*NET Resource Center (onetcenter.org)

Engineering and Technology - Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.

Mechanical - Knowledge of machines and tools, including their designs, uses, repair, and maintenance.

Production and Processing - Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.

Biology - Knowledge of plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.

Chemistry - Knowledge of the chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.

Geography - Knowledge of principles and methods for describing the features of land, sea, and air masses, including their physical characteristics, locations, interrelationships, and distribution of plant, animal, and human life.

Mathematics - Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.

Physics - Knowledge and prediction of physical principles, laws, their interrelationships, and applications to understanding fluid, material, and atmospheric dynamics, and mechanical, electrical, atomic, and sub-atomic structures and processes.

Psychology - Knowledge of human behavior and performance; individual differences in ability, personality, and interests; learning and motivation; psychological research methods; and the assessment and treatment of behavioral and affective disorders.

Sociology and Anthropology - Knowledge of group behavior and dynamics, societal trends and influences, human migrations, ethnicity, cultures, and their history and origins.

Job Zones and Educational Breakdown[4]

For a detailed description of Job Zones and other educational credentials shown in the dashboard, please see O*NET OnLine Help: Job Zones (onetonline.org)

Job Zone One (1) - Some of these occupations may require a high school diploma or GED certificate.

Job Zone Two (2) - These occupations usually require a high school diploma.

Job Zone Three (3) - Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.

Job Zone Four (4) - Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.

Job Zone Five (5) - Most of these occupations require graduate school. For example, they may require a master's degree, and some require a Ph.D., M.D., or J.D. (law degree).

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[4] The O*NET® Content Model at O*NET Resource Center (onetcenter.org)

Frequently Asked Questions

1. What is an O*NET Code?
   a. The Occupational Information Network (O*NET) is a free online database available to the public at no cost. O*NET codes represent a detailed occupational code.
   b. Learn more about O*NET at the [O*NET resource center page](#)

2. Are all occupations in the clean energy economy listed in this document?
   a. No, this is not an exhaustive list.

3. Are there descriptions of Green Topics?
   a. Not yet.

4. Why is "ABC occupation" not listed?
   a. Our data is pulled from the most recent iteration of US DOL's Green Topics. If you would like to suggest an existing occupation to be added to the dashboard, please share that with us using our feedback form.

5. Where is the data being pulled from?
   a. Labor Market Information is pulled from NYS Department of Labor [Long-Term Projections webpage.](#)
   b. All other data is pulled from [O*Net Online](#).

6. How were Green Topics selected?
   a. Please see [O*NET Interest Profiler Short Form Paper-and-Pencil Version: Evaluation of Self-Scoring and Psychometric Characteristics (onetcenter.org)](#)