# Glossary

**ABET** [N-UNCOUNT-U3] The **American Board for Engineering and Technology (ABET)** is the governing body that grants accreditation to university engineering degree programs in the United States. **Amerykańska Rada Akredytacyjna Inżynierii i Technologii**

**abstract** [ADJ-U6] Something that is **abstract** can generally exist only as an idea. It is the opposite of "concrete." **abstrakcyjny**

**accredited** [ADJ-U3] Something that is **accredited** has been officially recognized by a governing body as meeting certain basic requirements. **akredytowany**

**advertising** [N-UNCOUNT-U11] **Advertising** is the process of calling consumers' attention to a company's products or services. **reklama**

**agriculture** [N-UNCOUNT-U12] **Agriculture** is the science of farming. **rolnictwo**

**analysis** [N-COUNT-U5] **Analysis** is the act of closely examining something. **analiza**

**application** [N-COUNT-U5] **Application** is the act of putting an idea into practice. **zastosowanie**

**approach** [N-COUNT-U5] An **approach** is how you deal with something. **podejście**

**assembly line** [N-COUNT-U13] An **assembly line** is a line of workers or machines in a factory working on a product. A worker performs a job and then the product moves to the next worker. **linia montażowa**

**assess** [V-TRANS-U14] To **assess** something is to evaluate it. **ocenić, oszacować**

**attack** [V-TRANS-U5] To **attack** something is to attempt to solve it. **zaatakować, tu: próbować rozwiązać problem**

**axis** [N-COUNT-U7] An **axis** is the line on a graph that shows a point's position. **oś**

**bachelor's degree** [N-COUNT-U3] A **bachelor's degree** is an undergraduate degree that is awarded upon completion of a course of study that typically lasts four years. **stopień licencjata**

**bar graph** [N-COUNT-U7] A **bar graph** is a chart that uses rectangles of different lengths to show amounts. **wykres słupkowy/kolumnowy**

**blueprint** [N-COUNT-U8] A **blueprint** is a plan for building something. **projekt, plan**

**body language** [N-UNCOUNT-U4] **Body language** refers to communication through body movements instead of speaking. **język ciała**

**brittle** [ADJ-U9] A **brittle** material will break easily under pressure. **kruchy**

**calculation** [N-COUNT-U10] A **calculation** is a function of mathematics wherein numbers are manipulated to achieve a result. Calculations can include addition, subtraction, division, and other operations. **obliczenie**

**capacity** [N-UNCOUNT-U13] **Capacity** refers to the maximum amount of work a company or organization can perform. **zdolność produkcyjna, wydajność**

**catapult** [N-COUNT-U1] A **catapult** is a device designed to throw objects long distances without the use of explosives such as gunpowder. **katapulta**

**citation** [N-COUNT-U4] A **citation** is a reference to a piece of writing. **cytat**

**commission** [N-COUNT-U11] A **commission** is a payment made to a sales agent in return for securing a sale or other business relationship. **prowizja**

**common sense** [N-UNCOUNT-U2] **Common sense** is practical knowledge. **zdrowy rozsądek**

**competence** [N-UNCOUNT-U2] **Competence** is a person's ability to do something as it should be done. **kompetencja**

**competitor** [N-COUNT-U11] A **competitor** is a rival company that creates similar products and is competing for the same consumers. **konkurent**

**comprehension** [N-UNCOUNT-U5] **Comprehension** is the step of a problem solving method in which data and theory combine to solve a problem. **pojmowanie**

**computer science** [N-UNCOUNT-U14] **Computer science** is the study of how computers can be used. **informatyka**

**concrete** [ADJ-U6] Something that is **concrete** either currently exists in reality or could exist in reality. It is the opposite of "abstract." **konkretny**

**conductor** [N-COUNT-U9] A **conductor** is a material that lets electricity or heat pass through it. **przewodnik**

**consult** [V-T-U11] To **consult** with someone is to give them professional or expert advice. **konsultować**

**convention** [N-COUNT-U10] A **convention** is a method or practice established through widespread or common use. zwyczaj

**convention** [N-COUNT-U6] A **convention** is something that is the subject of general agreement or consent. konwencja

**conveyor** [N-COUNT-U13] A **conveyor** is a piece of equipment that moves materials in a line from one area to another. przenośnik

**coordinate** [N-COUNT-U7] A **coordinate** is a pair of numbers that show position on a graph. koordynaty

**cost-effective** [ADJ-U13] Something that is **cost-effective** is worth the amount of money you spent on it. kosztowo-efektywny / opłacalny

**counterweight** [N-COUNT-U1] A **counterweight** is a heavy object that is used to balance some type of load. In trebuchets, it is the weight that causes the sling to rotate around the pivot and launch the projectile. przeciwwaga

**courage** [N-UNCOUNT-U2] When you have **courage** you are brave enough to do something. odwaga

**creative** [ADJ-U6] Something that is **creative** is the result of unique and different thought or expression. twórczy

**crop** [N-COUNT-U12] A **crop** is a group of plants that you grow in order to eat or sell. plon

**cross-section** [N-COUNT-U8] A **cross-section** is a drawing of something cut in half to reveal the inside of it. przekrój

**cue card** [N-COUNT-U4] A **cue card** is a card with information that helps a person remember what to say. fiszka

**curiosity** [N-UNCOUNT-U2] **Curiosity** is an interest in learning something. ciekawość

**deficiency** [N-COUNT-U15] A **deficiency** is a lack of a necessary nutrient or other desirable item. niedobór

**degree** [N-COUNT-U2] A **degree** is an academic qualification completed at a college. stopień

**demonstrate** [V-I-U11] To **demonstrate** something is to show another person how it works. zademonstrować

**dependability** [N-UNCOUNT-U2] **Dependability** is the ability for people to trust you to do things. rzetelność

**dependent variable** [N-COUNT-U7] A **dependent variable** is a number that depends on the value of another part of a mathematical equation. zmienna zależna

**depth** [N-COUNT-U8] **Depth** is how deep something is. głębokość

**design** [N-COUNT-U14] The **design** of software is its planning and structure. projekt

**development** [N-UNCOUNT-U14] **Development** is the act of actually making software. programowanie

**diagram** [N-COUNT-U8] A **diagram** is a drawn plan for something. schemat

**digit** [N-COUNT-U10] A **digit** is a number. cyfra

**dimension** [N-COUNT-U8] A **dimension** is the size of something. wymiar

**distribution uniformity** [N-UNCOUNT-U12] **Distribution uniformity** is a percentage of how equally water is being applied to an area. równomierność rozkładu, tu: równomierność nawadniania

**DNA** [N-UNCOUNT-U15] **DNA** is a main component of chromosomes. It transfers genetic material in all living organisms. DNA

**DNA probe** [N-COUNT-U15] A **DNA probe** is a fragment of DNA that is used to detect a manipulated gene. sonda molekularna

**doctorate** [N-COUNT-U3] A **doctorate** is a postgraduate degree that typically represents the highest possible level of study in a particular field. It is achieved through several years of study beyond an initial undergraduate degree. doktorat

**drainage** [N-UNCOUNT-U12] **Drainage** is the removal of excess water. odwadnianie / drenaż

**ductility** [N-UNCOUNT-U9] **Ductility** refers to a material's ability to not break under tensile force. ciągliwość

**EAB** [N-UNCOUNT-U3] The **Engineering Accreditation Board (EAB)** is the governing body that grants accreditation to university engineering degree programs in the United Kingdom. Rada Akredytacyjna Inżynierii (w Wielkiej Brytanii)

**entry-level** [ADJ-U3] Something that is **entry-level** is related to low-level job positions wherein new university graduates can gain experience and skills. poziom podstawowy

**ergonomics** [N-UNCOUNT-U13] **Ergonomics** is the science of designing equipment and workspaces that benefit and aid the worker. ergonomia

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**expertise** [N-UNCOUNT-U11] **Expertise** is a high level of skill or knowledge on a certain topic or subject. **biegłość**

**exploded view** [N-COUNT-U8] An **exploded view** is a drawing that shows how different parts of something fit together by drawing the parts separately. **rozwinięcie, rysunek przedstawiający wzajemne ustawienie części względem siebie**

**expression** [N-UNCOUNT-U15] **Expression** is the action of a gene that is showing a certain distinguishing characteristic. **ekspresja**

**facility layout** [N-UNCOUNT-U13] **Facility layout** refers to the design and arrangement of a factory's workspace. **rozplanowanie zakładu pracy**

**feedback** [N-UNCOUNT-U6] **Feedback** is a reaction to an object or activity. It usually includes opinions on how the object or activity can be improved. **sprzężenie zwrotne**

**flood-irrigation** [N-UNCOUNT-U12] **Flood irrigation** covers an entire area with water. **nawadnianie powierzchniowe**

**gene** [N-COUNT-U15] A **gene** is a section of DNA which contains the information that determines physical characteristics. **gen**

**general-to-specific strategy** [N-COUNT-U4] A **general-to-specific strategy** is a way of organizing information so that you discuss general ideas first and then specific details. **strategia od ogółu do szczegółu**

**geometry** [N-COUNT-U8] **Geometry** is the mathematical shape and arrangement of an object. **geometria**

**GMO** [N-COUNT-U15] A **genetically modified organism (GMO)** is an organism whose genetic material has been changed. Both plants and animals can be GMOs. **organizm modyfikowany genetycznie**

**graph** [N-COUNT-U7] A **graph** is a diagram showing a relationship between variables. **graf**

**handout** [N-COUNT-U4] A **handout** is a document that you distribute to people during class or a presentation. **materiały (szkoleniowe)**

**hardness** [N-UNCOUNT-U9] **Hardness** is a property that makes an object difficult to dent or break. **twardość**

**hydrology** [N-UNCOUNT-U12] **Hydrology** is the study of water. **hydrologia**

**independent variable** [N-COUNT-U7] An **independent variable** is a number that does not depend on the value of another part of a mathematical equation. **zmienna niezależna**

**innovation** [N-UNCOUNT-U6] **Innovation** is the act of coming up with new and different ideas. **innowacja, nowatorski pomysł**

**insulator** [N-COUNT-U9] An **insulator** is a material that prevents heat or electricity from passing through it. **izolator**

**integer** [N-COUNT-U10] An **integer** is any positive or negative whole number, including zero. **liczba całkowita**

**interpersonal** [ADJ-U2] When something is **interpersonal** it is between people. **międzyludzki, interpersonalny**

**inventory** [N-COUNT-U13] An **inventory** is a list of the materials and goods in a factory. **inwentarz, lista inwentaryzacyjna**

**irrigation** [N-UNCOUNT-U12] **Irrigation** is the supplying of water to crops. **irygacja, nawadnianie**

**iteration** [N-COUNT-U5] An **iteration** is an instance of doing something repeatedly. **iteracja, powtarzanie**

**iterative procedure** [N-COUNT-U5] An **iterative procedure** is the act of doing something over and over with slight changes until you perfect it. **procedura iteracyjna**

**KISS** [V PHRASE-U4] **KISS** (Keep It Short and Simple) is a principle that reminds a person to present or do something in the simplest way. **krótko, prosto i do rzeczy**

**leading zero** [N-COUNT-U10] A **leading zero** is a zero that leads a number string. **zero prowadzące**

**length** [N-COUNT-U8] **Length** is how long something is. **długość**

**liaison** [N-COUNT-U11] A **liaison** is a person who creates and maintains contact between two groups in order to ensure collective action or cooperation. **łącznik**

**line graph** [N-COUNT-U7] A **line graph** is a chart showing points connected by straight lines. **wykres liniowy**

**localized irrigation** [N-UNCOUNT-U12] **Localized irrigation** applies small amounts of water directly to plants. **nawadnianie punktowe**

**logic** [N-UNCOUNT-U5] **Logic** is a reasonable way of thinking. **logika**

**logistics** [N-COUNT-U9] **Logistics** refer to the organizing of an operation or process so that it happens efficiently. logistyka

**long-term** [ADJ-U2] When something is **long-term** it happens for a long time. długoterminowy

**luster** [N-UNCOUNT-U9] **Luster** refers to the brightness or shine of a metal. połysk

**maintenance** [N-UNCOUNT-U14] **Maintenance** is fixing a software's flaws after it is released. utrzymanie oprogramowania

**malleable** [ADJ-U9] A **malleable** material bends easily when you press it. elastyczny, ciągliwy, kowalny

**manipulate** [V-I-U15] To **manipulate** something is to change or influence it. manipulować

**market research** [N-UNCOUNT-U11] **Market research** is the process of surveying the public to gain information about consumer tastes or preferences. badanie rynku

**marketing** [N-UNCOUNT-U11] **Marketing** includes all the activities that a company undertakes in order to advertise, sell, and deliver a product to consumers. marketing

**mass** [N-UNCOUNT-U1] **Mass** determines the degree to which a body creates or is affected by a gravitational field. In everyday usage, it is usually equated with the word "weight." In scientific usage, however, it can be used to refer to several different properties. masa

**master's degree** [N-COUNT-U3] A **master's degree** is a postgraduate degree that is awarded to people who have developed a level of mastery over a particular field. It is achieved through one or more additional years of study beyond an initial undergraduate degree. stopień magistra

**mechanical advantage** [N-UNCOUNT-U1] **Mechanical advantage** is the factor by which a machine or mechanism multiplies the force that is being applied to it. przełożenie siłowe maszyny

**MEng** [N-COUNT-U3] The **Master's of Engineering (MEng)** is a master's degree in the field of engineering. magister inżynier

**Middle Ages** [N-UNCOUNT-U1] The **Middle Ages** is a period of history that extends from the 5th century through the 15th century. Średniowiecze

**modify** [V-I-U11] To **modify** something is to alter or change the qualities of it in order to make it better. modyfikować

**molecular cloning** [N-UNCOUNT-U15] **Molecular cloning** is the process of copying genes. klonowanie molekularne

**MSc** [N-COUNT-U3] The **Master's of Science (MSc)** is a master's degree in a scientific field. magister nauk ścisłych

**MSc(Res)** [N-COUNT-U3] The **Master's of Science by Research (MSc[Res])** is a master's degree in a scientific field that is achieved primarily through research instead of classroom instruction. stopień magistra nauk ścisłych uzyskany na drodze badań własnych

**natural** [ADJ-U9] **Natural** materials come from nature. Glass, stone, and wood are some examples. naturalny

**norm** [N-COUNT-U6] A **norm** is a standard or commonly-held notion. norma

**notation** [N-COUNT-U10] In mathematics, a **notation** is a system of representing mathematical objects or ideas. Numbers and function symbols are examples of notations. notacja

**objective** [N-COUNT-U4] An **objective** is the main goal that a person aims to achieve. cel, zadanie

**operation** [N-UNCOUNT-U14] **Operation** is use of software. obsługa, działanie

**order of magnitude** [N-COUNT-U10] An **order of magnitude** is the class of scale of any amount. It usually contains a value that is of a certain ratio to the class preceding it. For example, 0.1 is one order of magnitude greater than 0.01, and 1 is one order of magnitude greater than 0.1. rząd wielkości

**organization** [N-UNCOUNT-U2] **Organization** is the ability to plan and put things together in an orderly fashion. organizacja

**originality** [N-UNCOUNT-U6] **Originality** is the quality of being independent, new, and unique. oryginalność

**out of the box** [ADJ-PHRASE-U6] Something that is **out of the box** is outside the realm of conventional thought or practice. Could also be expressed as "outside the box." nieszablonowy

**payload** [N-COUNT-U1] A **payload** is an object or quantity to be sent or thrown. masa użyteczna

**perimeter** [N-COUNT-U8] **Perimeter** is the length of something's outer edges. obwód

**PhD** [N-COUNT-U3] The **Doctor of Philosophy (PhD)** is a doctorate that can be achieved in a variety of fields. Dr

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**pivot** [N-COUNT-U1] A **pivot** is the object around which other objects rotate or turn. oś, sworzeń

**pivot-irrigation** [N-UNCOUNT-U12] **Pivot-irrigation** involves a machine that rotates, applying water to a circular area around the machine. nawadnianie rotacyjne

**plastics** [N-COUNT-U9] **Plastics** are synthetic materials that one can shape into many different forms. plastiki

**plausible** [ADJ-U6] Something that is **plausible** seems reasonable or achievable. wiarygodny, możliwy do przyjęcia

**postgraduate degree** [N-COUNT-U3] A **postgraduate degree** is any degree that is awarded upon completion of additional years of study beyond the initial undergraduate degree. Master's degrees and doctorates are examples of postgraduate degrees. stopień naukowy powyżej licencjatu

**presentation program** [N-COUNT-U4] A **presentation program** is a computer program that lets you display information in a slide show. program do prezentacji

**problem identification** [N-COUNT-U5] **Problem identification** is the act of stating what issues one must address in a situation. sformułowanie problemu

**problem modeling** [N-UNCOUNT-U14] **Problem modeling** is the assessment of software for issues. modelowanie problemu

**problem solving** [N-UNCOUNT-U2] **Problem solving** is the act of resolving issues and finding solutions. rozwiązywanie problemu

**projectile** [N-COUNT-U1] A **projectile** is an object that is being launched or thrown through the air. pocisk

**projector** [N-COUNT-U4] A **projector** is a machine that lets you show images on a screen or surface. projektor

**quality** [N-COUNT-U2] A **quality** is a feature that someone or something has. tu: cecha

**quality** [N-UNCOUNT-U14] **Quality** is how well software is designed. jakość

**quality control** [N-UNCOUNT-U13] **Quality control** refers to the activities one performs to ensure a product's quality and safety. kontrola jakości

**quantitative thinking** [N-UNCOUNT-U2] **Quantitative thinking** is the ability to think in terms of numbers. myślenie ilościowe

**quantity** [N-COUNT-U10] A **quantity** is an amount of something. It can be either precise or indefinite. ilość

**redefine** [V-TRANS-U5] To **redefine** something is to state it again in a different manner. przedefiniować

**rounding error** [N-COUNT-U10] A **rounding error** is a miscalculation that results from improperly rounding a number to a convenient number of decimals. błąd zaokrąglenia

**salinity** [N-UNCOUNT-U12] **Salinity** is the amount of salt in something. zasolenie

**scale** [N-COUNT-U8] **Scale** is the relationship between the size of something drawn and its real size. skala

**scatter plot** [N-COUNT-U7] A **scatter plot** is a chart with many points on it to show relationships between two variables. diagram rozproszenia

**schematic** [N-COUNT-U8] A **schematic** shows the form and features of something. schemat

**scientific notation** [N-UNCOUNT-U10] **Scientific notation** is a way of easily expressing very large or very small quantities. It incorporates the use of superscript digits. $3\times10^6$, for example, is 3,000,000 written in scientific notation. notacja wykładnicza

**select** [V-I-U15] To **select** something is to choose it. wybrać, wyselekcjonować

**siege engine** [N-COUNT-U1] A **siege engine** is a device that was used in the Middle Ages to destroy castle walls, city walls, or other fortifications during a siege. maszyna oblężnicza

**significant figure** [N-COUNT-U10] A **significant figure** is a digit that helps identify a number's precision. All numbers are significant except for leading and trailing zeros when they serve as placeholders, or digits that are introduced as a result of calculations that are carried out to more decimal places than the original numbers. cyfra znacząca

**signpost** [N-COUNT-U4] A **signpost** is a phrase or word that helps signal the different parts of a presentation to the audience. drogowskaz

**sling** [N-COUNT-U1] A **sling** is a device that holds and, when subjected to the proper forces, launches or throws a projectile. proca

**software engineering** [N-UNCOUNT-U14] **Software engineering** is a profession that develops and improves computer programs. inżynieria oprogramowania

**solution** [N-COUNT-U5] A **solution** is an answer to a problem. **rozwiązanie**

**streamline** [V-T-U13] To **streamline** an operation is to improve it and make it more efficient. **optymalizować**

**summarize** [V-T-U4] To **summarize** something is to briefly repeat its main points. **podsumować**

**supply chain** [N-COUNT-U13] A **supply chain** consists of all the people and resources that help get a product from a supplier to a customer. **łańcuch dostaw**

**synthesis** [N-COUNT-U5] A **synthesis** is a mixture of ideas. **synteza**

**synthetic** [ADJ-U9] **Synthetic** materials are artificial, man-made substances. **syntetyczny**

**technical** [ADJ-U11] If something is **technical**, it relates to a specific skill, art, or science. **techniczny / fachowy**

**technological** [ADJ-U11] If something is **technological**, it is related to science and technology. **technologiczny**

**tensile** [ADJ-U9] A **tensile** material is able to stretch easily. **rozciągliwy**

**testing** [N-UNCOUNT-U14] **Testing** is the act of making sure software works. **testowanie**

**tillage** [N-UNCOUNT-U12] **Tillage** is the preparing of soil for crops. **uprawa ziemi**

**torque** [N-UNCOUNT-U1] **Torque** is a measure of the turning force being placed upon an object. **moment obrotowy**

**trailing zero** [N-COUNT-U10] A **trailing zero** is a zero that occurs in the decimal representation of a number. No other digits follow a trailing zero (or a series of trailing zeros), and they are always considered significant. **zero końcowe**

**trait** [N-COUNT-U15] A **trait** is a distinguishing characteristic. **cecha (charakterystyczna)**

**transformation** [N-UNCOUNT-U15] **Transformation** is the process of changing in appearance, form, nature, or character. **przeobrażenie, przekształcenie**

**transparent** [ADJ-U9] A **transparent** material is clear and easy to see through. **przezroczysty**

**trebuchet** [N-COUNT-U1] A **trebuchet** is a weapon that was popular during the Middle Ages. It was often used to launch rocks and other items into to walls of the fort or castle that was being attacked. **katapulta**

**undergraduate degree** [N-COUNT-U3] An **undergraduate degree** is a degree that is awarded upon completion of a general course of study that typically last four years. **stopień naukowy do licencjatu włącznie**

**validation** [N-UNCOUNT-U14] **Validation** is making sure that software satisfies the user's needs. **walidacja, sprawdzenie**

**vector** [N-COUNT-U15] A **vector** is a DNA molecule that is used to transfer genetic material from one cell to another. **wektor**

**verification** [N-UNCOUNT-U14] **Verification** is making sure that software meets its design specifications. **weryfikacja**

**verification** [N-UNCOUNT-U6] **Verification** is the process of establishing the accuracy or truth of something. **weryfikacja**

**vision** [N-UNCOUNT-U6] A **vision** is an imaginative conception of something which has not happened yet. **wizja**

**visual aid** [N-COUNT-U4] A **visual aid** is an image that people look at during a presentation. **pomoc wizualna**

**water rights** [N-COUNT-U12] A **water right** is the right of a person to use water from a source like a river or stream. **prawo wodne**

**width** [N-COUNT-U8] **Width** is how wide something is. **szerokość**

**X axis** [N-COUNT-U7] The **x axis** is the horizontal axis on a graph. **oś odciętych**

**Y axis** [N-COUNT-U7] The **y axis** is the vertical axis on a graph. **oś rzędnych**