

Survey Glossary

- **Academic degree**—an award or title conferred upon an individual for the completion of a program or courses of study over multiple years at postsecondary education institutions.
- **Active** (in reference to programmatic activity status)—The activity is currently being worked on by the project team.
- **Activity** (also referred to as programmatic activity)—An operational, time-limited activity with an identified end state in support of an Engine making progress towards meeting NSF Engines programmatic goals or individual Engine goals.
- **Activity lead**—The individual who is responsible for overseeing the implementation, execution, and day-to-day operations to ensure that the programmatic activity is making timely progress towards its goal(s).
- **Adoption readiness level (ARL)**—Adoption readiness levels are a complement to technology readiness levels (TRLs) and assess the adoption risks of a technology and translates this risk assessment into the readiness of a technology to be adopted by the ecosystem.
- **Angel investor**—Individuals who invest their own funds into a startup.
- **At risk** (in reference to milestone status)—There are risks and/or issues that might impact the achievement of a milestone.
- **Cancelled** (in reference to programmatic activity status)—The activity has not finished, and work on the activity will not continue.

- **Certificate**—Nondegree awards for completing an educational program of study after high school.

- **Certification:** A non-degree credential awarded by a certification body based on an individual demonstrating through an examination process that he or she has acquired the designated knowledge, skills, and abilities to perform a specific job. The examination can be either written, oral, or performance based. Certification is a time-limited credential that is renewed through a recertification process.
- **Class I medical device**—These devices present minimal potential for harm to the user and are often simpler in design than Class II or Class III devices. Examples include enema kits and elastic bandages.
- **Class II medical device**—Medical devices that pose moderate to high risk to the patient or user. FDA classifies into class II devices for which general controls alone are insufficient to provide reasonable assurance of the safety and effectiveness of the device, and for which there is sufficient information to establish special controls to provide such assurance. Examples of class II devices include powered wheelchairs and some pregnancy test kits.
- **Class III medical device**—Class III devices usually sustain or support life, are implanted, or present potential unreasonable risk of illness or injury. Examples of Class III devices include implantable pacemakers and breast implants.

- **Clinical research**—Step three in the [drug and device development process](#) as defined by the Food and Drug Administration. Drugs are tested on people to make sure they are safe and effective. Clinical research consists of clinical trials phases 1 through 4.
- **Competitive funding**—Money obtained from an organization, local, State, or Federal government through a competitive process.
- **Completed** (in reference to programmatic activity status)—Work on the activity has finished, and all deliverables/tasks have been completed.
- **Copyright**—Intellectual property that protects original (art) works fixed in a tangible medium.
- **Credential**—verification of an individual’s qualification or competence issued by a third party with the relevant authority to issue such credentials.
- **Design patent**—Design patents are issued for a new, original, and ornamental design embodied in or applied to an article of manufacture, it permits its owner to exclude others from making, using, or selling the design. Design patents are not subject to the payment of maintenance fees.
- **Device discovery and concept**—Step one in the [device development process](#) as defined by the Food and Drug Administration. This is when research for a new device begins in the laboratory.
- **Discovery and development** —Step one in the [drug development process](#) as defined by the Food and Drug Administration. This is when research for a new drug begins in the laboratory.
- **Donation**—Allocation of resources, financial or non-financial, where there is no expectation of anything in return.
- **Ecosystem building activity**—An ecosystem building activity helps grow, build, support, and nurture the development of an inclusive, sustainable innovation ecosystem. This includes activities, research, initiatives, or efforts that engage entrepreneurs, policymakers, philanthropists, and other regional and community stakeholders to better understand, transform, or support the development of a system-wide approach to foster innovation and a culture of DEIA. An ecosystem building activity is any activity that does not fall into the categories of either a *R&D or translation activity*, or *workforce development activity*.
- **Educational certificate:** A non-degree credential awarded by an educational institution based on completion of all requirements for a program of study, including coursework and test or other performance evaluations. Certificates are typically awarded for life (like a degree). Certificates of attendance or participation in a short-term training (e.g., 1 day) are not in the definitional scope for educational certificates.
- **Employer identification number (EIN)**—The EIN, also known as a Federal Tax Identification Number, is a nine-digit number (in the format of XX-XXXXXXX) assigned by the Internal Revenue Service (IRS) to identify a business entity.
- **FDA post-market safety monitoring**— Step five in the [drug and device development process](#) as defined by the Food and Drug Administration. FDA monitors all drug and device safety once products are available for use by the public.

- **FDA review**— Step four in the [drug and device development process](#) as defined by the Food and Drug Administration. If a drug or device developer has evidence from its early tests and preclinical and clinical research that a device is safe and effective for its intended use, the company can file an application to market the device. The FDA review team thoroughly examines all submitted data on the device and decides to approve or not to approve it.
- **iEdison invention report number**—The "Invention Report Number" is a unique identifying number assigned by iEdison after you officially submit an Invention Report. This number is generally in the following format #####-##-####. The first set of numbers is a unique code for your organization in iEdison, the second is the last two digits of the year in which the subject invention was disclosed to your office, and the last four are a sequential number based on the order it was reported in iEdison.
- **Industrial design**—Intellectual property that protects the appearance or aesthetic features of a product.
- **In-kind contribution**—A non-monetary contribution. For instance, goods or services offered for free or at less than the usual charge result in an in-kind contribution. Similarly, when a person or entity pays for services on an Engine's or Engine activity's behalf, the payment is an in-kind contribution.
- **Intellectual property**—Creations of the mind, such as inventions; literary and artistic works; designs; and symbols, names, and images, used in commerce. In the United States, there are several types of intellectual property, which include patents, trademarks, copyrights, and trade secrets.
- **Invention disclosure**—Under the Bayh-Dole Act, researchers are required to disclose all inventions made under federal funding any time such inventions are developed.
- **Investment**—Allocation of resources, usually financial, with the expectation of generating a return or profit in the future.
- **License**: A non-degree credential awarded by a government agency that constitutes legal authority to do a specific job. Licenses are based on some combination of degree or certificate attainment, certifications, assessments, or work experience; are time-limited; and must be renewed periodically.
- **Milestone**—A significant point in development within an activity's life cycle used to measure the progress toward the ultimate goal of the activity.
- **Monetary contribution**—Money that is provided to an Engine or to support an Engine activity that does not have to be repaid.
- **Off track** (in reference to milestone status)—There are significant issues that have impacted the achievement of a milestone.
- **On hold** (in reference to programmatic activity status)—The project has not finished, and work on the project has been temporarily suspended.
- **On track** (in reference to milestone status)—A milestone is on schedule, within scope, and within budget. Project resources are available for project activities when needed.
- **Partner organization**—An organization that actively participates or is involved in one or more programmatic activities; and provides an Engine with monetary or in-kind

contributions. Fee-for-service work, where there is no active participation and collaboration, will not be regarded as an Engines partnership.

- **Patent**—Intellectual property that protects inventions.
- **Phase 1 clinical trial**—The purpose of phase 1 clinical trials is to assess safety and dosage. During phase 1 studies, researchers test a new drug in normal volunteers (healthy people). Phase 1 studies are closely monitored and gather information about how a drug interacts with the human body.
- **Phase 2 clinical trial**—The purpose of phase 2 clinical trials is to assess efficacy and side effects. In phase 2 studies, researchers administer the drug to a group of patients with the disease or condition for which the drug is being developed.
- **Phase 3 clinical trial**—The purpose of phase 3 clinical trials is to assess efficacy and monitor adverse reactions. During phase 3 studies, researchers demonstrate whether or not a product offers a treatment benefit to a specific population.
- **Phase 4 clinical trial**—The purpose of phase 4 clinical trials is to assess safety and efficacy. Phase 4 trials are carried out once the drug or device has been approved by FDA during the Post-Market Safety Monitoring.
- **Plant patent**—Plant patents are issued for a new and distinct, invented or discovered asexually reproduced plant including cultivated sports, mutants, hybrids, and newly found seedlings, other than a tuber propagated plant or a plant found in an uncultivated state, it permits its owner to exclude others from asexually reproducing the plant and making, using, or selling the plant for a period of up to 20 years from the date of patent application filing ++. Plant patents are not subject to the payment of maintenance fees.
- **Preclinical research**— Step two in the [drug and device development process](#) as defined by the Food and Drug Administration. This is when drugs undergo laboratory and animal testing to answer basic questions about safety.
- **Programmatic activity**—See definition for **Activity**.
- **Programmatic category**—All activities taking place under an Engine will fall into one of three categories: R&D and translation; workforce development; or ecosystem building.
- **Programmatic lead**—An individual who is responsible for overseeing the portfolio of activities within a programmatic category.
- **Research and development (R&D) activity** (also referred to as use-inspired R&D)—An activity will be considered an R&D activity if it falls into TRL 1-3 with the aim to advance further along the TRL spectrum. The end goal of R&D and translation activities is to bring a product, technology, or service to market, whether through commercialization or open source.
- **Restricted cash**—Cash that is designated for a specific purpose.
- **Technology research level (TRL)**—A framework that measures the maturity level of a technology throughout its research, development, and deployment phase progression. The TRL scale ranges from 1 to 9, with 9 being the most mature technology.
- **Trade secret**—Intellectual property that protects commercially valuable business information.
- **Trademark**—Intellectual property that protects marks in commerce that indicate the source or origin of goods or services.

- **Translation activity**—An activity will be considered a translation activity if it falls into TRL 4-9. The end goal of R&D and translation activities is to bring a product, technology, or service to market, whether through commercialization or open source.
- **Unrestricted cash**—Cash that is available to be spent for any purpose.
- **Utility patent**—Utility patents are issued for the invention of a new and useful process, machine, manufacture, or composition of matter, or a new and useful improvement thereof, it generally permits its owner to exclude others from making, using, or selling the invention for a period of up to 20 years from the date of patent application filing ++, subject to the payment of maintenance fees. Utility patents are also referred to as *patents for invention*.
- **Use inspired research and development (R&D)**—see definition for research and development (R&D) activity.
- **Venture capital**—Investment from a group of professional investors who work for firms or companies that pool money from groups of investors into a combined fund to invest in emerging businesses.
- **Venture philanthropy**—Type of impact investment that applies the principles and concepts of venture capital and applies them to philanthropic goals to achieve social impact or promote a social good.
- **Workforce development activity**—A workforce development activity is one that provides a combination of job training, development opportunities, or education along with social services and community supports to position an individual for long-term success in the workforce related to an Engine's technology focus area.