Glossary of Terms

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ID/Type/OLE		Word/Definition/Link
215	3D Design/Print	3D Scanner
		n. A device used to scan a 3-dimensional object and reproduce it as a 3D design file. It normally uses a combination of pictures and laser measurements.
		https://en.wikipedia.org/wiki/3D_scanner
180	3D Design/Print	ABS
		n. Acrylonitrile Butadiene Styrene, a thermoplastic used as a 3D printer material. ABS is soluble in acetone. Acetone can be used to smooth the surface of a printed part.
		https://en.wikipedia.org/wiki/Acrylonitrile_butadiene_styrene
204	3D Design/Print	Additive Manufacturing
		n. Also called "3D Printing." A process whereby three dimensional objects are made in successive layers, usually under computer control.
		https://en.wikipedia.org/wiki/3D_printing
182	3D Design/Print	Amniotic Band Syndrome
		n. Amniotic Band Syndrome occurs when the fetus becomes entangled in fibrous, string-like amniotic bands in the womb which restricts blood flow to the appendage that is affected.
		https://en.wikipedia.org/wiki/Amniotic_band_constriction
183	3D Design/Print	Biopolymer
-		n. A polymer produced by living organisms.
		https://en.wikipedia.org/wiki/Biopolymer
184	3D Design/Print	CAD/CAM
		n. Computer aided design and computer aided manufacturing.
		https://en.wikipedia.org/wiki/Computer-aided_technologies

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ID/Type/OLE		Word/Definition/Link
211	3D Design/Print	Chamfer
		n. In 3D Design, a transitional edge at the junction where two planes meet. https://en.wikipedia.org/wiki/Chamfer
		inteps.//en.wikipedia.org/wiki/Channer
185	3D Design/Print	Enabling the Future Community
		n. A worldwide community dedicated to utilizing 3D printers to create 3D printed hands and arms for those in need of an upper limb assistive device.
		http://enablingthefuture.org/
186	3D Design/Print	Extrusion
		n. A process by which material is pushed through a die of a desired cross-sectional profile. Such a "die" is referred to as an "extruder."
		https://en.wikipedia.org/wiki/Extrusion
189	3D Design/Print	Filament
		n. In 3D Design and Printing, the extruded material that is stored on a spool and is pushed through a heated die.
210	3D Design/Print	Fillet
		n. A 3-D Design process of filling in a junction where two planes meet with material that is curved.
		https://en.wikipedia.org/wiki/Fillet_(mechanics)
187	3D Design/Print	Fused Deposition Modeling (FDM)
		n. An additive manufacturing technology commonly used for modeling, prototyping and production applications.
		https://en.wikipedia.org/wiki/Fused_deposition_modeling

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188	3D Design/Print	Fused Filament Fabrication (FFF)
		n. An additive manufacturing process whereby a continuous filament of material is fed through a moving, heated extruder head and is deposited onto a growing workpiece.
		https://en.wikipedia.org/wiki/Fused filament fabrication
190	3D Design/Print	G-code
		n. A language used to direct machine tools on how to make something.
		https://en.wikipedia.org/wiki/G-code
191	3D Design/Print	Hand-o-matic
		n. A computer program available at www.enablingthefuture.org that uses measurements provided by users, to re-size models for parts comprising prosthetic hands and arms and to download them to the user.
192	3D Design/Print	Heated Bed
		n. That part of a 3D, fuse deposition modeling (FDM) printer onto which the filament is extruded. When heated filament cools, it can cool in an irregular way causing warping to occur. A heated printer bed can reduce unwanted warping.
193	3D Design/Print	Hot End
		n. The heated extruder of a 3D, fuse deposition modeling (FDM) printer.
194	3D Design/Print	Kapton Tape
		n. A polyimide film developed by DuPont Corporation in the 1960's. It is used in 3D printing to adhere ABS parts to printer beds. Also used to secure a heating element to an extruder barrel.
		https://en.wikipedia.org/wiki/Kapton

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209	3D Design/Print	Loft
		v. A 3D Design process where a line is moved along a transverse line to create a 2-dimensional surface.
		IDWordDefinitionLinkOLE ObjectType
212	3D Design/Print	Mirror
		v. A 3D Design technique where the designer copies the attributes of a design to the opposite side across from a line (in a 2-dimensional design) of a plane (in a 3-dimensional design).
195	3D Design/Print	NEMA
		n. A standard to describing the specification of a stepper motor utilized by the National Electric Manufacturers Association (NEMA).
		https://en.wikipedia.org/wiki/National Electrical Manufacturers Association
213	3D Design/Print	Offset
		v. A design technique where one adds an offsetting parallel line or curve a specified distance away from a line, curve or spline.
196	3D Design/Print	PLA (Polylactic Acid)
		n. Refers to a type of 3D printing filaments made of polylactic acid.
		https://en.wikipedia.org/wiki/Polylactic_acid
197	3D Design/Print	Raft
		n. In 3D printing, a technique used to prevent warping. With a raft, parts are built on a bed of disposable material that is exposed to a larger are of the printer bed than the part itself. The larger area of exposure promotes adhesion to the printer bed.
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207	3D Design/Print	Revolve
		v. A 3D Design procedure where one rotates a 2-dimensional sketch around an axis and, thereby, create a 3-dimensional design.
200	3D Design/Print	Slicer
		n. A computer program that translates a design in ".stl" format into machine code (g-code) for each layer for a part being produced on a 3D printer.
214	3D Design/Print	Spline
		n. A 3D Design technique where one creates a curve from a free-hand drawing.
		https://en.wikipedia.org/wiki/Smoothing_spline
201	3D Design/Print	Stepper Motor
		n. A brushless DC motor that divides a full rotation into a number of equal rotational steps.
		https://en.wikipedia.org/wiki/Stepper_motor
199	3D Design/Print	Stereolithography Apparatus (SLA)
		n. A form of 3D printing technology whereby layers of parts are "grown" layer by layer. Each layer, usually composed of light-sensitive resin, is cured by light (photopolymerization) which causes the polymer chains to link.
		https://en.wikipedia.org/wiki/Stereolithography
202	3D Design/Print	n. Refers to "Stereo Lithography," and also stands for "Standard Triangle
		Language" or "Standard Tessilation Language." In 3D design and Printing, a file format which describes the surface geometry of 3D object.
		https://en.wikipedia.org/wiki/STL_(file_format)

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205	3D Design/Print	Subtractive Manufacturing
		n. Also referred to as "machining." A process whereby a larger piece of material is cut into a desired shape, normally from the outside inwards.
		https://en.wikipedia.org/wiki/Machining
203	3D Design/Print	Support Material
		n. Disposable printing material which provides support for "overhangs" or "arches" so they will retain their intended shape until the extruded material cools. The support material is removed during "post processing" of the part.
208	3D Design/Print	Sweep
		v. A 3D design process where one moves a 2-dimensional sketch from the beginning to the end of a line or spline, thereby creating a 3-dimension design.
181	3D Design/Print	Thermoplastic
		n. A plastic that softens with the application of heat. Plastic is material that is composed mainly of carbon polymers and is compliable and moldable.
		https://en.wikipedia.org/wiki/Thermoplastic

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