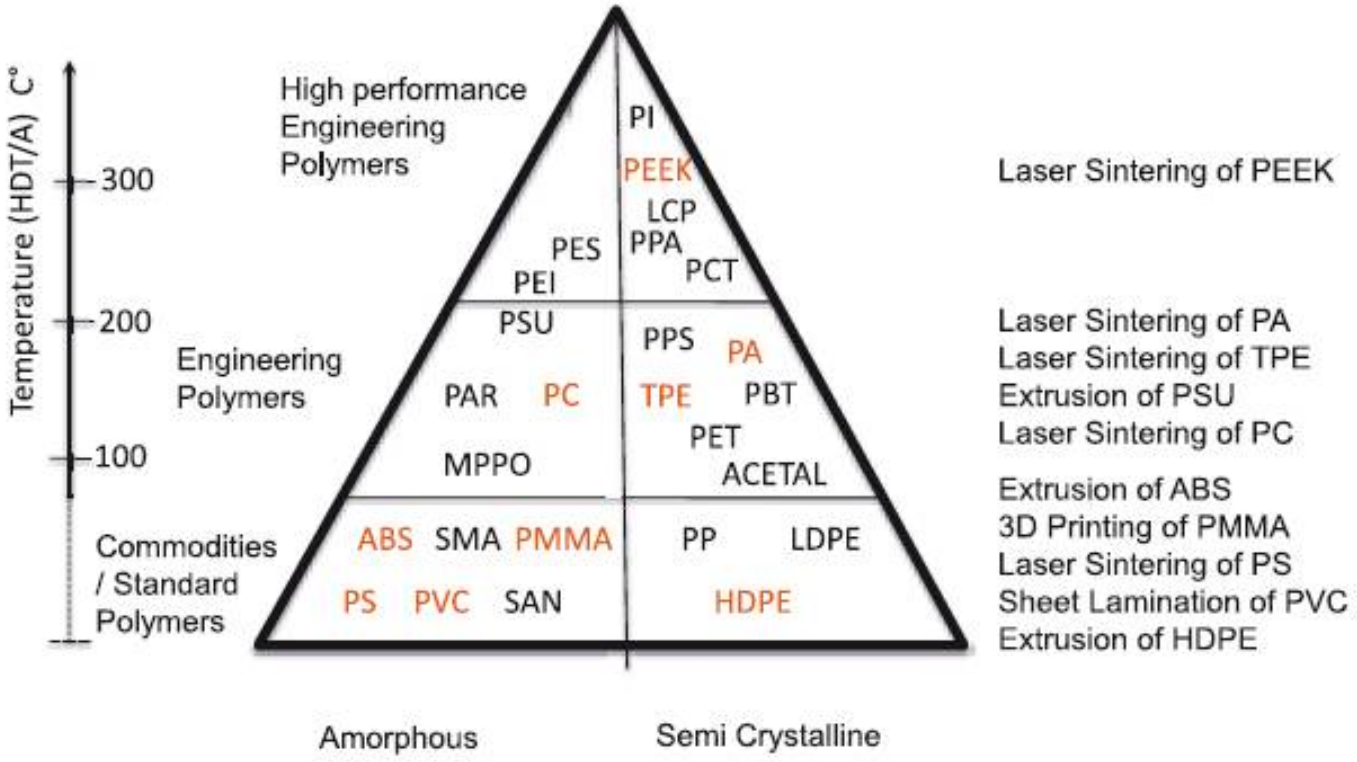
Plastic triangle with plotted AM processes and related materials



Material	Strength	Weakness	3D Printer
PLA, ABS	• Low-cost • Fast turnaround times • High stiffness	• Limited dimensional accuracy • Print layers are likely to be visible • More brittle	FDM
Resin	• Fine features • high detail • Smooth surface • injection mold-like prototype • surface finish	• Support marks may be visible on surface • Brittle • not recommended for functional parts	SLA / DLP
Nylon	• good chemical resistance • Perfect for functional applications. • excellent mechanical properties	• Higher cost than FDM • Longer lead times	SLS
PEI	• High performance applications • Flame retardant • Food safe • Good mechanical properties	• Limited dimensional accuracy	FDM

Materials	Technology
Standard, tough, flexible, transparent, & castable resins	**SLA**
Standard & castable resins	**DLP**
Standard, tough, flexible, transparent, & castable resins	**CDLP**
ABS, PLA, Nylon, PC, fiber-reinforced Nylon, ULTEM, exotic filaments (wood-filled, metal-filled)	**FDM**
Rigid, transparent, multi-color, rubber-like, ABS-like. Multi-material and multi-color printing available	**Material jetting**
Stainless steel, ceramics	**NPJ**
Wax	**DOD**
Silica sand, PMMA particle material, gypsum, Stainless steel, ceramics, cobalt-chrome, tungsten-carbide	**Binder jetting**
Titanium, stainless steel, aluminum, copper, tool steel	**LENS**
Titanium, stainless steel, aluminum, copper nickel, 4340 steel	**EBAM**