

Technology Need	Advanced Concepts Program	Space Enterprise Technology Development Program	Space Science Core Technology Program	Focused Technology Programs	Flight Utilization Program
Advanced Structures Deployment and Control					
Large Lightweight Nonprecision Structures	█	█	█	█	█
Lightweight Optically Precise Structures	█	█	█	█	
Advanced Lightweight Materials				█	
Communications					
Radio Frequency (RF) Microcommunications Systems	█	█	█	█	█
Optical Communication Systems	█	█	█	█	
High-Rate RF Systems and Components	█	█	█	█	█
Design Tools					
User Interfaces	█	█	█	█	
Collaborative Design Infrastructure	█	█	█	█	
Integrated Design and Simulation Tools			█	█	
Verification and Validation					
Lightweight Optics					
Large Lightweight Mirrors	█	█	█	█	
Deployable Telescopes				█	
Optical Control Systems	█			█	
Science Instruments					
Submillimeter and Millimeter Instruments				█	
Ultraviolet, Visible, and Infrared Sensors				█	
Spectrometer and Radiometer Systems				█	
High-Energy Instruments	█	█	█	█	
Active Optical Sensing				█	
Radar Systems				█	
In-Situ Systems				█	█
Cryocoolers and Cryogenic Systems				█	
Metrology					
Laser Metrology				█	
Precision Active Optics				█	
Ultrastable Structures	█			█	
Sample Acquisition and Return					
Sample Selection and Acquisition Systems	█			█	
Sample Preparation and Storage Systems	█			█	
Power					
Energy Storage Systems	█	█	█	█	█
Power Conversion	█	█	█		
Photovoltaic Power Systems	█	█			█
Nuclear Power Systems	█			█	
Spacecraft System and Intelligence					
Advanced Spacecraft Architectures	█	█	█	█	█
Instrument and Spacecraft Computing Systems	█	█	█	█	█
Guidance, Navigation, and Control Sensors and Actuators			█		
Autonomous Science Algorithms and Architectures	█		█	█	█
Autonomous Operations Components and Algorithms	█	█	█	█	█
Transportation and Mobility					
Onboard Spacecraft Propulsion	█	█			█
Planetary/Rover Systems and Components	█	█		█	
Aerobraking/Aerocapture, Aerostabilized Systems					
Planetary and Small Body/Ascent Propulsion Systems	█		█	█	

*Through D6-4, EO-2 only