HUMAN HEALTH AND PERFORMANCE Exploring Space | Enhancing Life

Human-Centered Design and Space Architecture

Center for Design and Space Architecture (CDSA)



Renowned Skills and Unique Capabilities

The Center for Design and Space Architecture (CDSA) is NASA's conceptual, human centered design studio. We leverage skill in architecture and industrial design to provide customers with functional, intuitive solutions that synchronize with the integrated system. To achieve this, we employ an iterative design process and utilize a variety of digital and physical mediums, including CAD, virtual reality, and full-scale mockups, to quickly progress design maturity.

Core Capabilities

- Space Architecture: mission architecture, internal layout, functional allocation, volumetric analysis
- Design: concept development, CAD modeling, mass and volume estimation, rendering, mockup and prototype design
- Virtual Reality: design review and evaluation, task simulation, crewed human-in-the-loop (HITL) testing
- Fabrication: 3d printing, CNC, foam core, polycarbonates, wood, metal
- Mockups: part-task, full-scale, test articles, functional prototypes



Visualization Lab

Design Studio (B15 Rm 276) Fabrication Shop (B14 Tunnel)





For the benefit of all

For more information: NASA Human Health and Performance Directorate www.nasa.gov/hhp/



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