Florida Institute of Technology offers a Master’s program in Human-Centered Design (HCD).

- Candidates with backgrounds and degrees in engineering, science and human factors, as well as arts and architecture are encouraged to apply.
- A graduate degree in HCD supports independent scholarly work, opportunities in academia, or to pursue advanced research and leadership in government, industry and business.
- Current research is in: cognitive engineering, life-critical systems, complexity analysis for HCD, human-centered organization design and management, modeling and simulation, advanced interaction media, creativity and design thinking, functional analysis, industrial design, and usability engineering.
- Internationally connected with best research and professional institutions in HCD.

Themes

**Cognitive Engineering:** Human-centered design and automation, cognitive modeling, risk, safety, situation awareness, decision-making, scenario-based design

**Advanced Interaction Media:** Interactive technology, ubiquitous computing, control devices, 2D and 3D information visualization, multi-touch surfaces

**Complexity Analysis for HCD:** Complex systems and theories, emerging behavior and properties, design for simplicity, self-organization

**Life-Critical Systems:** Comparing safety, efficiency and comfort of complex dynamic systems such as in aerospace, medicine, nuclear energy, process control, extreme environments, as well as everyday life systems

**Human-Centered Organization Design and Management:** Knowledge and uncertainty management, socio-technical stability, governance, product integration, organizational automation

**Modeling and Simulation:** Discrete and multi-agent modeling and simulation platforms and methods, CAD, PLM, logical models, human-in-the-loop simulations, simulation-based requirement engineering

**Function Analysis:** Task, activity and work analyses, cognitive function emergence and discovery, function allocation, operational procedures and automation

**Usability Engineering:** Sensorimotor, cognitive and social models and measures, ergonomic guidelines, emotional stress, fatigue, workload, pleasure, conceptual models

**Creativity and Design Thinking:** Problem-solving using out-of-the-box approaches, concept thinking, storyboarding, parallel thinking, participatory design, inspiration and innovation

**Industrial Design:** HCD of life-critical systems including industrial and everyday-life products such as cockpits, control room, emergency centers, interior design and architecture