

About the Curriculum

IDEAS Academy at Houston Community College's West Houston Institute prepares students with the mindsets and skillsets most needed today to address the challenges and realize the opportunities of a digital and global 21st century. "IDEAS" stands for Innovation, Design, and Entrepreneurship in the Arts and Sciences. We believe it is the intersection of these disciplines that will lead to a more sustainable and resilient future here in Houston and beyond.

The IDEAS Mindsets & Skillsets curriculum introduces students to three core mindsets: Creative Identity, Digital DNA, and Sustainable Futures. Each student develops their own identity and approach to creativity, establishes digital fluency in their understanding and use of technologies to augment creativity and innovation, and cultivates awareness of global issues with a commitment to contributing towards the goals of sustainability for the planet. This is accomplished through personal reflection, case study discussions, and activities which, by the end of the semester, lead to individual and team projects.

Through their participation in this curriculum, students will:

1. Develop a unique creative identity that connects personal passion to meaningful purpose in the world.
2. Utilize the methods of design thinking, agile, and lean startup to create solutions to complex problems.
3. Apply digital approaches to augment their own creativity and scale their concepts from prototype to production.
4. Work with teams, experts, and networks locally and globally to collaborate and exchange knowledge and ideas.
5. Make connections across human-created and natural systems to contribute towards a sustainable and resilient future.

Dimensions of the Experience

The IDEAS Academy experience involves multiple dimensions working together in a unified system to develop the whole student. These six dimensions are included to varying degrees in each program in ways that are uniquely relevant to each cohort as determined by faculty leads. The student is at the center. It is the goal of the program that in addition to the collective experience, that each participant also gains a personal perspective that will support them in the next stage of their personal, educational, and professional development.



The Creativity Helix



An iterative creative process is followed based on classical design thinking and lean startup methods for project work. This approach provides students with practice in user research and fieldwork, ideation processes, collaborative teamwork, prototyping, and testing, and launching of their ideas. The creative process for the challenge is organized into three phases: Explore, Imagine, and Create with an additional step of Iterate throughout. Each phase guides the cohort through a divergent and convergent decision-making process that can be visualized as a helix diverging at each phase's start and converging at its end.

Modules & Lessons



The curriculum is organized around three modules: Creative Identity, Digital DNA, and Sustainable Futures. Each module contains a series of lessons; each lesson contains several activities designed to be implemented in a week (although the details of that implementation – across several class meetings or as one longer after-school session, for example – are flexible). The activities and lessons in each module lead toward the completion of an individual mini-project. At the end of the semester, a student showcase will highlight these mini-projects and student profiles.

Creative Identity Module
The Innovator: Creative Impact
The Designer: Creative Process
The Entrepreneur: Creative Value
Digital DNA Module
Digital Transformation & the DIY Revolution
DIY Labs
Fab City Visions of the Future
Sustainable Futures Module
Social Impact: UN Global Goals
Environmental Balance: Design Ecology
Economic Resilience: Circular Economy

Although the timeline and pacing of each individual lesson is flexible, we suggest that all lessons contain common elements and follow the same general sequence:



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- Introduce the Theme (journaling, think-pair-share discussion)
- Background (webpage reading & learning summary in journal)
- Activity (specific to lesson, generally group but may be individual)
- Reflect (journaling, personal profile element)

A Educator’s Guide is provided for each module. It contains an introduction to the module and brief description of the lessons and products for that module. It also contains links to related resources (such as articles, videos, etc. that can be used to provide additional information for students or build additional class activities. It also contains detailed plans for each lesson, including objectives, activity descriptions, rubrics, and additional resources.

Agent of Change Profile Project

Students will create a project that represents their takeaway from this experience, and especially how the curriculum intersects with own individual identity. The project could be a digital or physical project (i.e. digital story, 3D printed object, creative work of art, etc.) and should reflect the mindsets and skillsets they have acquired throughout the semester. The project should incorporate a creative element, a digital element, and a sustainability element. While students may work collaboratively on projects, each individual student should be represented in the final products. The artifacts of this project will be displayed in a student showcase at the West Houston Institute at the end of the Fall semester.

Fall Semester Timeline

Week 1: August 16	IDEAS Academy Kickoff
Week 2: August 23	The Innovator: Creative Impact
Week 3: August 30	The Designer: Creative Process
Week 4: September 6	The Entrepreneur: Creative Value
Week 5: September 13	Mini-project: Creative Identity Spark
Week 6: September 20	Digital Transformation & the DIY Revolution
Week 7: September 27	DIY Labs @ WHI IDEASstudio
Fall Break: October 6-8	
Week 8: October 11	DIY Labs @WHI IDEASstudio
Week 9: October 18	Fab City Visions of the Future
Week 10: October 25	Social Impact: UN Global Goals
Week 11: November 1	Environmental Balance: Design Ecology
Week 12: November 8	Economic Resilience: Circular Economy
Week 13: November 15	Working week: Change Agent Profile
Thanksgiving Break	
Week 14: November 29	Working week: Change Agent Profile
Week 15: December 6	Student Showcase