Design Thinking, Innovation, and Human-Centered AI Summer Program

June 15th – 26th 2026

RUTGERS

JUNE 15TH-26TH 2026

$3,000

Design Thinking, Innovation, and Human-Centered AI

Summer Program

THINK. CREATE. INNOVATE.

Experience a transformative 2 weeks of innovation! Dive into a hands-on exploration of design thinking and AI, where you'll learn practical principles, unleash your creativity, and collaborate to bring your ideas to life. Participants will explore how Artificial Intelligence can be utilized and applied ethically to enhance human creativity, empathy, and innovation. Human-Centered AI principles will be embedded within sessions on empathy, ideation, prototyping, iteration, and reflection.

For inquiries, please contact Emma Leary at:
emma.leary@rutgers.edu

Program Overview

The Design Thinking, Innovation & Human-Centered AI Summer Program is a two-week immersive experience designed for students who want to tackle real-world challenges through creativity, collaboration, and emerging technologies.

Hosted at Rutgers University, a top U.S. public research institution, the program brings together students from around the world—including participants from India, China, South Korea, Taiwan, and the United States—to explore design thinking methodologies, human-centered innovation, and ethical applications of artificial intelligence.

Through interdisciplinary teamwork, real-world design challenges, hands-on workshops, and Makerspace prototyping, participants learn how to understand user needs, reframe complex problems, generate creative ideas, build prototypes, and test solutions iteratively. Artificial intelligence is introduced as a creative and analytical collaborator, with a strong emphasis on ethics, inclusivity, trust, and usability.

The program is supported by Rutgers' Professional Science Master's (MBS) programs, recognized for leadership in experiential, interdisciplinary STEM-business education.

No prior experience in design or AI is required—only curiosity, openness, and a willingness to experiment.

Why Design Thinking + Human-Centered AI?

As AI increasingly shapes products, services, and society, innovation must remain human-centered, ethical, and inclusive. This program equips participants to:

- Design solutions grounded in empathy and real human needs
- Use AI to augment—not replace—human creativity and judgment
- Apply ethical frameworks to AI-enabled products and experiences
- Navigate periods of technological and societal change with creativity and confidence

Learning Objectives:

By the end of the program, participants will be able to:

- Develop empathy-driven approaches to problem-solving

- Apply design thinking principles to complex, interdisciplinary challenges

- Conduct user research, synthesize insights, and reframe problems

- Generate and evaluate ideas through creative ideation techniques

- Build, test, and refine low- and mid-fidelity prototypes

- Strengthen creative confidence, communication, and teamwork skills

- Understand the fundamental principles of Human-Centered AI (HCAI)

- Apply ethical, inclusive, and usability-focused frameworks when designing AI-enabled experiences

What You Will Experience

Hands-On Design Practice

Daily workshops guide students through the full design thinking lifecycle: empathize ➜ define ➜ ideate ➜ prototype ➜ test.

Human-Centered AI in Action

Participants explore how AI tools can support creativity, research, ideation, and storytelling—while critically examining bias, ethics, and trust.

Makerspace & Prototyping

Students use the Rutgers Makerspace to build physical and digital prototypes, including rapid modeling and 3D printing.

Global Collaboration

Teams are intentionally diverse, bringing together students from different countries, cultures, and academic backgrounds.

Real-World Application

Projects are grounded in real challenges, encouraging practical, portfolio-ready outcomes.

Program Deliverables

Participants will complete the program with:

- A design-thinking project prototype or concept

- A process portfolio documenting empathy maps, journey maps, ideation artifacts, and prototype iterations
- Experience presenting ideas through storytelling and pitching
- A culminating project showcase, where teams present their final solutions to faculty, peers, and invited guests
- A Certificate of Completion from Rutgers University

Who Should Apply?

This program is ideal for undergraduate and graduate students from any discipline—including Business Administration, Engineering, Computer Science, Life Sciences, and beyond. Innovation thrives at the intersection of fields, and no prior design or AI experience is required. All you need is curiosity and enthusiasm.

Faculty & Guest Experts

Participants learn from Rutgers faculty and experienced practitioners in design, AI, communication, and innovation, including:

- **Dr. Rupananda Misra** – Associate Teaching Professor; Human-Centered AI & design innovation

- **Dr. Jay Goldring** – Assistant Professor of Professional Practice; sustainability & entrepreneurship

- **Dr. Lindy Ryan** – Assistant Professor; storytelling & data visualization

- **Kathleen Cashman-Walter** – Assistant Teaching Professor; communication & leadership

- **Abbe Rosenthal** – Assistant Director & Executive Coach; design thinking philosophies

- **Dr. Jay Yogeshwar** – Lecturer; artificial intelligence and ethical innovation

Cultural & Social Experience

Learning extends beyond the classroom. Participants will engage in:

- A guided trip to New York City

- Visit to Princeton

- Social and networking activities with peers and faculty, including golf

- Informal collaboration and cultural exchange

These experiences foster global perspective, friendships, and professional connections.

Program Logistics

- **Dates:** June 15–26, 2026

- **Duration:** Two weeks (full-day sessions)

- **Location:** Rutgers Science and Engineering Resource Center (SERC), New Brunswick, NJ

- **Format:** In-person, experiential learning

- **Credits:** Available in both credit and non-credit formats

- **Cohort Size:** Small, selective cohort

- **International Participants:** Limited seats available (15–20 students)

- **Housing:** Silvers Apartments

- **Tuition:** $3,000

  - **INCLUDES:** Housing, breakfast and lunch, social and cultural activities (including trip to NYC, Princeton, etc.), prototyping materials and equipment, and airport pick-up and drop-off

  - **DOES NOT INCLUDE:** Travel & dinner

Program Coordinators

United States: Emma Leary – emma.leary@rutgers.edu

India: Ridhiman Sarkar – rsarkar@iie.org

China and South Korea: Yao Ge – yaoge@global.rutgers.edu

Day	Time	Theme	Key Topics & Activities
Day 1	10 am – 12 pm	Welcome Session	- Introduction to the program - Overview of Design Thinking mindset and process - Icebreaker activity
	12 pm – 1 pm	Lunch	
	1 pm – 2:30 pm	Introduction to Makerspace	- Makerspace tools and trainings
	2:30 pm - 4:30 pm	Foundations of Design Thinking & Innovation	- Principles of human-centered innovation - Team formation - World map ice breaker
Day 2	10 am – 12 pm	Creativity in Empathy: Understanding Users	- Introduction to creativity in user research - Interviewing, observation, empathy mapping - Empathy in both human and machine contexts - Journey mapping & user personas - Applying ethical standards for research & AI Ethics
	12 – 1 pm	Lunch	
	1 pm – 2:30 pm	Hands-on activity	- Draft interview plan - Create an informed consent form - Practice user interviews
	2:30 – 4:30 pm	Tour of Campus	- Tour the 5 Rutgers New Brunswick Campuses
Day 3	10 am – 12 pm	Field Research & User Interviews	- Conduct interviews or field observations - Synthesize research findings - Identify user pain points and motivations - Build journey maps & empathy maps
	12 – 1 pm	Lunch	

	1 pm – 2 pm	Hands-on activity	- Affinity Diagram & Personas
	2 – 4:30 pm	Recreational Activity	- Rutgers Golf (weather permitting)
Day 4	10 am – 12 pm	Define: Reframing Problems as Opportunities	- Defining problem statements - Reframing exercises to unlock innovation - Create POV statements
	12 – 1 pm	Lunch	
	1 – 2 pm	Lecture	- Lecture by Professor Jay Yogeshwar Topic: Human Centered AI and Ethical Innovation
	2 – 4:30 pm	Exploring Design in Art	- Zimmerli Art Museum - Analyze and reflect on design traditions in art
Day 5	10 am – 12 pm	Ideate: Generating Creative Solutions	- Divergent thinking and brainstorming techniques - SCAMPER, mind maps, "How Might We..." - Creative collaboration strategies - Explore AI tools as creative collaborators in ideation
	12 – 1 pm	Lunch	
	1 – 2 pm	Lecture	- Lecture by Kathleen Cashman-Walter, MBA, PCC Topic: Communication & Leadership
	2 – 4:30 pm	Hands-on Activity & Movie	- Hands-on ideation session - Dot voting - Film as a lens for innovation and empathy
Day 6	Trip to	New York City	Global Design and Innovation Excursion
Day 7	Rest Day	Optional Trip to Rutgers Gardens	
Day 8			

	Time	Session	Details
	10 am – 12 pm	Prototype: Bringing Ideas to Life	- Overview of rapid prototyping methods - AI in Prototyping Tools - Create a low-fidelity paper or digital prototype - Storyboarding innovative concepts
	12 – 1 pm	Lunch	
	1 – 2 pm	Lecture	- Lecture by Jay Goldring, Professor, Ph.D. Topic: Sustainability
	2 – 4:30 pm	Hands-on activity	- Create 3D models for 3D printing
Day 9	10 am – 12pm	User Testing – Planning	- Principles of usability testing - Designing effective user tests – identify goals, tasks, metrics and success criteria - AI & Emerging methods in Usability Testing
	12 – 1 pm	Lunch	
	1 – 2 pm	Lecture	- Lecture by Abbe Rosenthal, MA, PCC, DYL Certified Coach & Facilitator Topic: Design Your Life
	2 – 4:30 pm	Esports Games and Facility	- Video game design and engagement
Day 10	10 am – 12 pm	User Testing – Feedback & Insights	- Test prototypes with peers - Capture feedback using "I like," "I wish," "What if…" - Emotion AI Testing - Synthesizing user feedback - Applying Experience models
	12 – 1 pm	Lunch	
	1 – 2 pm	Lecture	- Lecture by Professor Lindy Ryan Topic: Data Storytelling
	2 – 4:30 pm	Library Resources	- Attend Rutgers library webinar - Debrief reflections

Day 11	10 am – 12 pm	Accessibility & Inclusive Design Testing	- Understand accessibility principles - Introduction to Universal Design principles - Understand WCAG standard and test for accessibility
	12 – 1 pm	Lunch	
	1 – 2 pm	Hands-on activity	- Conduct Heuristic WCAG standards and test for accessibility
	2 – 4:30 pm	Excursion to Regional Destination	- Visit Princeton
Day 12	10 am – 12 pm	Final Presentations & Reflection	- Team presentations to peers/stakeholders - Reflection on creative process and innovation mindset - Next steps for applying Design Thinking in real-world contexts
	12 – 1 pm	Lunch	
	1 – 2 pm	Closing ceremony	- Closing remarks and next steps
	2 – 4:30 pm	Certificate Presentation + Social Networking	- Networking

JOIN US!

Build real solutions.
Design with empathy.
Innovate responsibly.
Create the future—human-centered.

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Additional questions? Please contact Emma Leary at emma.leary@rutgers.edu