Design Innovation for the Internet of Things

This two-day design innovation course provides a framework for thinking about the co-evolution of design and technology, with a focus on emerging trends in the Internet of Things.

DATE
December 4-5, 2017

LOCATION
Jacobs Institute for Design Innovation, UC Berkeley Campus

PROFILE
Senior Executives
Engineering Leaders
Engineering Designers

LECTURERS
Björn Hartmann, Ph.D.
Eric Paulos, Ph.D
Scott Moura, Ph.D

FEES
$3500

REGISTER
exec-ed.berkeley.edu

WHAT IS THE INTERNET OF THINGS?

The "Internet of Things" (IoT) is the concept associated with devices becoming connected as the cost of sensors and connectivity continues to plunge. Connected devices can be as simple as a toaster signaling its status, or as complex as a jet engine streaming real-time updates during flight. More than 50 billion IoT connected devices are expected by 2020.

WHO SHOULD ATTEND

The program is designed for engineering leaders, designers, and practitioners working in a range of sectors, including corporate R&D labs, manufacturing, and/or consumer goods.

PROGRAM TOPICS

- What is the Internet of Things?
- Innovation at the intersection of design and technology
- Design thinking and human-centered design processes
- Emerging IoT technologies related to wearables, consumer products and infrastructure
- Hands-on rapid interaction prototyping workshop
- Industry Examples

OVERVIEW AND BENEFITS

Advances in design are often intricately interwoven with advances in fundamental technologies, and the most iconic products excel in both areas. This two-day course provides a framework for thinking about the co-evolution of design and technology, with a focus on emerging trends in the Internet of Things.

Leading faculty from the College of Engineering will lecture on IoT topics, explaining how this emerging technology is changing the product and service landscape from the body to the city, and why a human-centered design approach is essential in deploying new technologies successfully.

Industry experts will complement faculty-led sessions with case studies illustrating these concepts. In workshop sessions, participants will have a chance to bring ideas together through rapid prototyping.

LEAD FACULTY

Björn Hartmann, Ph.D.

Associate Professor and Faculty Director of the Jacobs Institute for Design Innovation, UC Berkeley College of Engineering; design innovation expert.

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ADDITIONAL FACULTY

Eric Paulos, Ph.D.

Associate Professor and Chief Learning Officer of the Jacobs Institute for Design Innovation, UC Berkeley College of Engineering

Scott Moura, Ph.D.

Assistant Professor and Director, Energy, Controls, and Applications Lab, UC Berkeley College of Engineering

"This is an extraordinary time to be an engineer. Technology is evolving rapidly and has enormous power to shape how we live. But in order to realize the best economic and societal possibilities of technology, it is critical that engineering professionals have the knowledge and tools to lead the way."

**Shankar Sastry
Dean, College of Engineering**

JACOBS INSTITUTE FOR DESIGN INNOVATION

The Jacobs Institute for Design Innovation is UC Berkeley's interdisciplinary hub for learning and making at the intersection of design and technology. The Jacobs Institute views design and technological innovation as integrally linked: innovation opens possibilities and extends the reach of design, while design links new technologies with human experiences and ensures that innovation truly benefits people and communities.

Bringing together technical depth, design methodology, and a focus on societal impact, the Jacobs Institute aims to enable participants to understand both the under-the-hood details that make something work and the big-picture context that makes something matter.

OTHER PROGRAMS OFFERED

Disruptive Technologies

- Augmented and Virtual Reality
- Industrial Applications for the Internet of Things

Technology Leadership

- Engineering Leadership Professional Program
- Global Technology Leaders Program
- Positive Leadership and Innovation
- Silicon Valley Innovation Leadership Week
- Lean Construction Principles

Joint Certificate Program with the UC Berkeley Executive Education at the Haas School of Business

- Disruptive Technology and Commercialization

Custom Programs
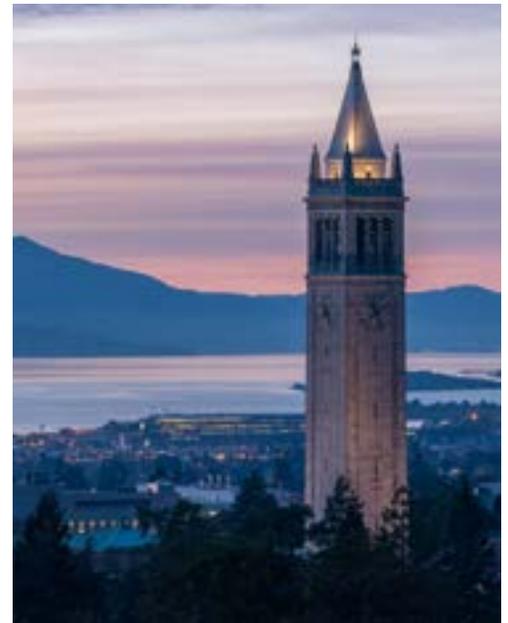
TAKING LEADERS TO THE NEXT LEVEL

UC Berkeley Engineering Executive & Professional Education prepares engineering and technical professionals for leadership roles by cultivating expertise and skills in technology and leadership.

THE UC BERKELEY ENGINEERING DISTINCTION

Recognized as one of the world's top three engineering schools, we understand engineers and what they face as they move into leadership roles in global environments. We bring the perspective of a faculty of thought leaders - engineers who are creating tomorrow's knowledge today - who have real-world industrial experience as entrepreneurs, heads of Research and Development, and consultants to industry.

All of our programs incorporate these strengths as the basis of design and delivery so that our program graduates are well-versed in how to fill global engineering roles. We recognize the tremendous strengths and skills that engineers and scientists have developed through their education and experience. Engineers are adept at mastering complex systems and making decisions in the most challenging technological situations. We teach them how to apply these skills to global business and organizational situations and challenges.

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EXECUTIVE & PROFESSIONAL EDUCATION