

Greenhouse



THE UNIVERSITY OF ARIZONA
BIOSYSTEMS ENGINEERING
Controlled Environment
Agriculture Center

Engineering Design & Crop Production

Online & In-Person
March 26th - 28th, 2025

Short Course

Circular Controlled Environment Agriculture
for Sustainability

Day 1: Fundamentals Of CEA and Hydroponics | Wednesday, March 26th

8:00 am - 8:45 am	Check-in for on-site participants
8:45 am - 9:00 am	Welcome and Introductions Dr. Murat Kacira - CEAC Director, Interim Head and Professor, Biosystems Engineering Department, The University of Arizona
9:00 am - 9:45 am	Greenhouse Design Basics Dr. Gene Giacomelli - Professor, Biosystems Engineering, The University of Arizona
9:45 am - 10:00 am	Discussion and Q&A
10:00 am - 10:45 am	Climate Control Dr. Murat Kacira - CEAC Director, Interim Head and Professor, Biosystems Engineering Department, The University of Arizona
10:45 am - 11:00 am	Discussion and Q&A
11:00 am - 11:30 am	Break & Exhibitor Networking
11:30 am - 12:15 pm	Integrated Pest Management Dr. Triston Hooks - Assistant Professor, Biosystems Engineering, The University of Arizona
12:15 pm - 12:30 pm	Discussion and Q&A
12:30 pm - 1:30 pm	Lunch
1:30 pm - 2:15 pm	Hydroponic Plant Production Basics Dr. Triston Hooks - Assistant Professor, Biosystems Engineering, The University of Arizona
2:15 pm - 2:30 pm	Discussion and Q&A
2:30 pm - 3:00 pm	Sponsor Presentations
3:00 pm - 4:30 pm	CEAC Tour Day 1 Teaching Greenhouse & AdvanCEA Greenhouse



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Day 2: Circularity in CEA | Thursday, March 27th

9:00 am - 9:45 am

Opportunities for Circularity in CEA

Dr. Ryan Lefers- Founder, Iyris

9:45 am - 10:00 am

Discussion and Q&A

10:00 am - 10:45 am

Optimizing Circular Food Systems through the Integration of Diverse CEA Crops

Dr. Goggy Davidowitz - Professor, Department of Entomology, University of Arizona

10:45 am - 11:00 am

Discussion and Q&A

11:00 am - 11:30 am

Break & Exhibitor Networking

11:30 am - 12:15 pm

Substrates of the Future: Materials, Performance and Sustainability

Dr. Jose Chen Lopez - Horticulture Specialist, Premier Tech

12:15 pm - 12:30 pm

Discussion and Q&A

12:30 pm - 1:30 pm

Lunch

1:30 pm - 1:45 pm

CEAC Mission Award

1:45 pm - 2:45 pm

Sustainability Panel

2:45 pm - 3:15 pm

Sponsor Presentations CEAC

3:15 pm - 4:30 pm

CEAC Tour Day 2

Mushroom Lab

Optional: MISAS & Mars Lunar Greenhouse



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Day 3: Microgreens, Aquaponics, and Mushrooms Production in CEA | Friday, March 28th

9:00 am - 9:45 am	Microgreens Production in CEA Dr. Yujin Park, Assistant Professor, School of Applied Sciences and Arts, Arizona State University
9:45 am - 10:00 am	Discussion and Q&A
10:00 am - 10:45 am	Strawberry Production in CEA Karla Garcia, Technical Service Specialist, Hort Americas
10:45 am - 11:00 am	Discussion and Q&A
11:00 am - 11:30 am	Break & Exhibitor Networking
11:30 am - 12:15 pm	Producing High Value Lions's Mane Mushrooms in Controlled Environment Systems Dr. Barry Pryor, Professor, School of Plant Sciences, The University of Arizona
12:15 pm - 12:30 pm	Discussion and Q&A
12:30 pm - 1:30 pm	Lunch
1:30 pm - 2:15pm	Aquaponics in CEA Dr. Matthew Recsetar, Assistant Professor, Biosystems Engineering, The University of Arizona
2:15 pm - 2:30 pm	Discussion and Q&A
2:30 pm - 4:00 pm	CEAC Tour Day 3 Aquaponics Greenhouse & Vertical Farm



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