

ASU Rob and Melani Walton Sustainability Solutions Initiatives

Arizona State University



Executive Certificate in the *Ethical Circular Economy* offered in partnership with the Arizona Recycling Coalition

The term circular economy is gaining traction in the private sector across Europe and the United States as a new approach to transitioning product and service development, urban infrastructure and economic development around maximum resource efficiency and effectiveness by closing loops in both design and disposal of products and materials. The ethical circular economy emphasizes systems thinking, social values, impact and equity in addition to the traditional approach to circular economy.

This certificate course, offered through Arizona State University, the largest and most innovative university in the United States and a global leader in sustainability education, consists of two sections: an approximately four to six hour, self-paced online introduction to ethical circular economy followed by a one-day face-to-face interactive workshop. The course is appropriate for those with limited knowledge of circular economy, but work in supply chain management or urban infrastructure development areas, such as supply chain logistics, purchasing, distribution, materials management, construction or solid waste management.

During the course, participants will:

1. Learn what circular economy is, how it works and the schools of thought that formed its foundation such as industrial ecology, cradle-to-cradle, net positive, biomimicry and life cycle analysis.
2. Work in groups to redesign a marketable product or service based on circular economy principles and models.
3. Apply newly acquired knowledge to define applicability to their local environment using themes such as the built environment, organic waste, recyclables and other material streams.
4. Complete a broad, high-level net positive impact assessment using the sustainable development goals as the comparative ethical framework.

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Faculty - leaders in global sustainability thought and practice:



Dr. Raj Buch, PhD, Practice Lead with the Global Sustainability Solutions Services at Arizona State University, drives circular economy efforts at ASU on international projects that create social and environmental impact for developing economies in Africa and Asia, such as piloting sustainable food systems, irrigation systems development and “circular cities.” Raj is also involved in launching a supply chain logistics “solutions lab” at ASU in partnership with the W.P Carey Supply Chain Management, with the goal of developing logistics solutions for developing economies around the world.



Mara DeFilippis, Project Manager with Global Sustainability Solutions Services, Arizona State University, specializes in partnership and project development to drive sustainability solutions. Prior to her current role at ASU, she worked with the Energize Phoenix project and the State Energy Sector Partnership grant in the Economic Development Dept. with the City of Phoenix. She is the founder of The Green Chamber: Greater Phoenix and was appointed CEO of the organization in 2008. Prior to founding the Green Chamber, Mara spent several years in the securities industry where she focused on identifying socially and environmentally responsible companies for clients who had a commitment to socially responsible investments.

Program Description:

Prior to the in-person workshop, participants will have access to an online learning packet that will provide an introduction to ethical circular economy. Readings and videos will focus on defining circular economy, understanding the current state of circular economy and the associated industry terminology. Topics will include the history of circular economy, open vs. closed loop systems, and net positive impact. The online learning packet is designed to fully prepare workshop participants with the knowledge necessary to excel in the face-to-face workshop. During the one full-day face-to-face-workshop, participants will work in groups to design closed-loop solutions to “linear” system challenges.

Certificate Format - the course consists of two sections:

- Online Learning Packet (prep work approximately 4-6 hours)
 - Videos
 - Readings
- One full-day face-to-face pre-conference session
 - Content review, discussion
 - Project work with course instructors
 - End-of-course assessment
 - Participants will receive a certificate upon completion of the course

Questions? Contact Mara.Defilippis@asu.edu.



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