**University of Arkansas**

Environmental Resiliency Certifications, Accounting and Metrics

Graduate Certificate

Curriculum

**ENRE 5223 Carbon Accounting**

This course will introduce students to the concept of carbon accounting and its most common applications in the corporate and public sectors. As corporations and communities establish stronger sustainability goals and ever stricter and more detailed GHG emissions targets, the need for professionals well-versed in the standards, methodologies, protocols, and tools used for quantifying GHG emissions and offsets is growing rapidly. During this course, students will learn the basic principles of accounting for carbon emissions and offsets and will gain experience applying those concepts to an example company’s GHG data. The course will also cover popular GHG emission and offset standards and reporting platforms, in addition to GHG capture, storage, and removal technologies that are currently being utilized and some that are under development. Reading materials will consist of real-world annual Corporate Social Responsibility (CSR) reports, publications by popular carbon accounting and forest carbon standard organizations, and academic articles.

**ENRE 5333 ESG Reporting**

Overview of current ESG Reporting landscape focusing on benchmarking, communication strategies, and data collection. The course will cover best practices for reporting and utilize case studies to review strategies of organizational approaches to annual improvements. Students will learn the skill to lead, organize, and implement reporting systems that can be applied across industries, from consumer goods to nonprofits.

**ENRE 5433** **Built Environment Certification Systems**

Introduction to the principles of built places impacting sustainability and resilience to serve as a broad theoretical overview underpinning the building and community rating systems such as LEED, LBC, BREEAM, and others.  Students learn about the built environment's impact on global systems, communities of people, and individual health and well-being.  Students will learn about water, energy, materials, health and air quality, and the building rating systems.

**ENRE 5123 Foundations of Environmental Resiliency**

An introduction to the concepts and strategies centered on resilience as it relates to the built and natural environment.  Concepts include systems thinking, socio-ecological frameworks, Panarchy, and resilience frameworks, and diagnostics. Strategies include foundations of sustainability science and policy with ideas about dynamic environmental events and adaption methods.  Case study investigations provide a summative and formative conclusion to course activities.

Recommended Electives:

**ENRE 5223 You Cannot Manage What You Do Not Measure**

This class will look at developing and using frameworks to help track, assess, and manage energy, water, biodiversity, waste, and more across their businesses and supply chains. The tools are out there, but are you using them in ways that truly make a difference? And, are you using measurement as a way to drive leadership in sustainability and resiliency?

**ENRE 5133 Science Communication for Executives**

Overview of current best practices for science communication to corporate and executive level leadership focusing on ESG metrics. Companies face primarily structural challenges when pursuing long-term targets and communication is key to effectively allocating internal resources and reporting transparent progress. This course will give students the skills to assess the best approaches for their organization and role to convey the urgency of climate change and communicate essential milestones for tracking success. Through case studies and mock corporate-level communication projects to the class, students will have opportunities to practice the skills they learn and be ready to implement them in their current or future ESG role.