#### **CVEN 4834: Solid Waste**

Covers the scope of the nonhazardous solid waste problem and regulations that drive its management; discussions of non-engineering factors that impact waste management and recycling; design of incinerators, composting facilities, and landfills used to treat and dispose of solid waste.

## CVEN 4833/5833: Colorado River Water Crisis

Cover in detail the history of Colorado River water including significant political and social events and their development within a physically varying and changing Colorado River basin hydro-climate system. and how that has led to today's water crisis.

## **AREN 4830: Landscape Lighting Design (ENVD)**

Landscape Lighting Design introduces the fundamentals of nighttime illumination for landscape and exterior architectural spaces. Students will learn about the interaction of light and human vision at night, lighting technologies used in outdoor settings, and lighting design principles and techniques that use light and darkness both creatively and responsibly.

### AREN 5830: Illumination 2

Applies the principles studied in Illumination 1. Provides further study in architectural lighting design methods. Uses lighting studio work to develop a broad knowledge of lighting equipment, design methods, and their application in a series of practical design problems in modern buildings.

# CVEN 5836-002: Artificial Intelligence and Machine Learning Concepts and Applications in the Built Environment

Introduces fundamental concepts and theories of AI/ML through the use of real-world data and practical demonstrations encompassing various examples from built environment design, planning, construction, and operation. Covers limitations and ethical considerations such as privacy and bias in designing and adopting human-centered AI/ML models. Prompts students to utilize available resources to collaborate and put forward their own real-life examples in order to demonstrate the comprehension of the concepts and potential applications in research and practice.