

Climate variability and change pose threats to lives and livelihoods. These climate risks can be managed through the design and operation of infrastructure systems, as well as through disaster response and recovery. In this course, you will learn a structured "bottom-up" decision analytic framework for quantitative climate risk analysis.

## **COURSE OBJECTIVES**

After completing this course, you will be able to:

- Evaluate and describe the strengths and weaknesses of different approaches to modeling the impact of weather and climate hazards on critical systems.
- 2. Apply and critique methods for cost-benefit analysis, optimization, policy search, and stochastic control to climate adaptation problems.
- 3. Describe multiple frameworks for decision making under deep uncertainty.
- 4. Choose models of climate impacts and decision analytical frameworks well suited to a particular problem and justify the choice.

## **REQUIREMENTS**

An introductory course in statistics (eg, CEVE 313)

## WHAT TO EXPECT

- Assigned readings that cover both methods and applications (no textbook)
- Key concepts to be implemented through programming case studies
- Active class participation

## **INSTRUCTOR**



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