

1. Course Details - CES (Climate & Energy Policy)

Instructor	Dr. Hong S
Detailed Course Title	Climate Change and Energy Policy Simulation Spring 2024
Course Description	This course is designed to introduce students to the fundamental science of climate change and energy, exploring their interrelations through the use of policy simulation software. The curriculum heavily relies on the energy modeling domain to shape an understanding of climate and energy policies, elucidating how they reshape the policy landscape and contribute to the emergence of a new energy economy centered around clean energy. This course offers a valuable opportunity to comprehend the complex mechanisms linking energy systems and policy decisions.
Course Objective	<ul style="list-style-type: none">A. Understand the science of climate change and its relation to energy.B. Utilize simulation for energy policy modeling.C. Explore the development of sustainable energy policies.
Course Contents	<p>Section A (Lectures & Hands-On Experience):</p> <ul style="list-style-type: none">Week 1: Basics of Climate Change and Energy SystemsWeek 2: Overview of Energy Technologies and Their Role in Climate MitigationWeek 3: Energy Policy Modeling Techniques and ApplicationsWeek 4: Advanced Simulation Exercises in Energy <p>Policy Section B (Seminars & Discussions):</p> <ul style="list-style-type: none">Week 5: Seminar on National Climate Change Strategies and Renewable Energy PoliciesWeek 6: Workshop on Using Energy Policy Simulators for Policy DevelopmentWeek 7 & 8 : Discussion on the Global
Prerequisite	Sustainable energy without hot air (https://www.withouthotair.com/) by David MacKay provides the overview of the energy technologies. This book sets out the various alternative low-carbon pathways that are open to non experts.
Assignment	Essay & Presentation