ISEN Spring 2020 Courses

Spring marks the launch of FIVE NEW ISEN courses, ahead of the formal launch of the NU Master of Science in Energy and Sustainability (MSES) in Fall 2020. Get a sneak-peak of the all curriculum - 26 new courses - that will be available to all students at the University, in the coming academic year.

QUESTIONS? Email isened@northwestern.edu.

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ISEN Spring 2020 Course Index (click any to jump to a course description):

- **ISEN 230/PHIL 270** Climate Change and Sustainability: Ethical Dimensions (TTh 12:30-2p)
  Mark Thomson, Dept. of Philosophy
  Course Synopsis: What are our ethical responsibilities in the face of anthropogenic climate change? We will focus on a range of common behaviors relevant to climate change and ask whether we can ethically justify our individual participation in these behaviors. Required for the ISEN Undergraduate Certificate.

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- **ISEN 390/MECH_ENG 380** Special Topics: Thermal Energy Systems Design (MWF 10-11a)
  Manohar Kulkarni, Clinical Full Professor, Mechanical Engineering
  Course Synopsis: Applications of the principles of energy engineering analysis to the design of thermal systems. Consideration on of such systems as air conditioning, oil piping, refrigeration, fluid distribution, and pneumatic control. Projects will be tailored to the class.

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- **ISEN 440** Private Energy & Sustainable Infrastructure Development and Finance (T 3-6p)
  Tom O'Flynn, CEO & Chief Investment Officer, AES Infrastructure Advisors
  Paul Astolfi, Partner and co-head of renewable energy practice group, Mayer Brown LLP

- **ISEN 470** Sustainability in Water and Wastewater (NEW; 0.5 credits, second five-weeks)

- **ISEN 471** Sustainable Food (NEW; 0.5 credits, first five-weeks)

- **ISEN 472** Climate Activism and Its Business Impacts (NEW; 0.5 credits, second five-weeks)

- **ISEN 498** Energy and Sustainability Project Practicum (NEW)
ISEN 470 Sustainability in Water and Wastewater (0.5 credits, Th 6-9p, second 5-weeks: May 7-June 4)  
**Patrick Boyle**, Director, Corporate Sustainability, Sloan Valve

Course Synopsis: Provides an introduction to the economics, technology and regulation that drive water and wastewater markets. Survey of the major issues that exist and a discussion of opportunities to drive to more sustainable water systems.

ISEN 471 Sustainable Food (0.5 credits, M 6-9p, first 5-weeks: March 30-April 27)  
**Anthony Kingsley**, Local & Sustainable Product Lead, US Foods

Course Synopsis: Main sustainability topics related to the production, transportation, processing and consumption of food. Focus on tangible methods to promote sustainability in the food industry such as regenerative agriculture techniques, reducing GHG emissions throughout the supply chain and reduced food waste.

ISEN 472 Climate Activism and Its Business Impacts (0.5 credits, M 12-3p, second 5-weeks: May 7-June 4)  
**Sarene Marshall**, Lead, Corporate Sustainability Program, Inter-American Development Bank

Course Synopsis: Offers an overview of climate activism and its business impacts over time. Analyzes the way in which consumer behavior and corporate policy are affected by activism.

ISEN 498 Energy and Sustainability Project Practicum (TTh 11a-12:30p)  
**Holly Benz**, Clinical Professor, McCormick School of Engineering; Director, NU Master of Science in Energy and Sustainability (MSES)

Course Synopsis: 10-week, team-based consulting project for a corporate, non-profit or government partner of Northwestern University. Student teams will be advised by the instructor but will work directly with the client organization. There will be limited traditional reading / lecture content and the topics covered will include project management and team collaboration.