Earth, Energy and Sustainability (BSc)

Currently at 8 billion, the Earth's population is on target to reach close to 10 billion by 2050. What are some of the key environmental challenges related to this population growth now, and in the future? What can you do to make a real change in this world? These are key questions addressed in the major Earth, Energy & Sustainability at LUC. This major operates at the forefront of environmental sciences, with a balance between understanding key concepts within a classroom setting, and applying the gained knowledge in real-life situations, both in the field and in the laboratory.

This major might be for you if you are interested in the following questions:

- How can we mitigate climate change, and limit warming to 1.5 degrees Celsius?
- What are GMOs, and what are the opportunities and risks associated with using them?
- How is the impact of climate change related to food systems?
- How is biodiversity loss related to biofuel production?
- How do we decarbonise our economies? And how do we do so in a way that is fast, fair, and largescale?

"I strongly believe sustainability challenges are the most critical issues of our time, and the EES major gave me a solid foundation to understand and help solve these problems. EES allows you to explore a range of areas in the sustainability field while simultaneously focusing on the topics and methods that interest you most. For example, I especially liked the energy-related courses in EES, which led me to specialize in sustainable energy for my master's program."

Anya Al-Salem | USA

e-prospectus

	Core tracks Earth, Energy and Sustainability		
	Ecosystem Health	**Earth System Science**	**Energy & Natural Resources**
	Core courses		
100-level	• Environmental Science	• Earth System Science	• Energy and Resource Management
200-level *Example Methodology course: Geographic Information Systems*	• Conservation Biology	• Climate Change	• Alternative Energy Strategies • Social and Gender Analysis for Sustainability
300-level *Example Methodology course: Advanced Quantitative Research Methods*	• Ecosystem services • Marine Biology	• Water Resource and River Management • Earth System Modeling	• Decision Analysis in Energy Systems • Water-Energy-Food Nexus
400-level	**Capstone thesis**		

What does the future hold?

This major prepares you to start your career in a highly dynamic and fast-moving field of sustainability. At LUC we emphasize that sustainability ultimately exists within a human context. Therefore, there are many crosslinks within the major to the social sciences through courses such as environmental economics, common pool resource management, and environmental governance.

Graduate Studies

- MSc Energy Science, Utrecht University, The Netherlands
- MSc Biodiversity, Conservation and Management at Oxford University, UK

Careers

- Environmental Consultancy
- Research
- Advisor Government or NGO