

ENERGY TRANSITION AND SUSTAINABILITY

Contact Information

Energy Transition and Sustainability
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This integrative professional master's program will draw upon faculty and course offerings across multiple departments within engineering and natural sciences to address future energy challenges. The consensus recognition of climate change, extreme weather events, and still-growing carbon dioxide emissions is leading to irreversible shifts in how we generate and use energy, chemicals, and materials sustainably, while managing and lowering the impact of greenhouse gases in the environment. Renewable energy sources, such as wind and solar, geothermal energy, H₂ production/storage, carbon capture and sequestration are all ways to generate global energy supply and to reduce emissions. This program will provide the skill set for scientists and engineers to apply their transferable skills to the search for new energy sources, to develop new technologies to harness, store, and utilize this energy and to recover and remove the products of energy usage, and to design sustainable systems for the long term.

The workforce that will take on this task must be developed and trained in foundational and applied skills to address these challenges. Rice University is poised to lead in this domain, given its well-established expertise in materials science, energy technologies, energy systems, subsurface geoscience, and environmental research.

Energy Transition and Sustainability does not currently offer an academic program at the undergraduate level.

Master's Program

- [Master of Energy Transition and Sustainability \(METS\) Degree](https://ga.rice.edu/programs-study/departments-programs/engineering/energy-transition-sustainability/energy-transition-sustainability-mets/)

Directors of Graduate Studies

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Professors

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Lecturers

David Abraham
Catie Donohue
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Ericson de Paula
Kenneth Medlock
Hon-Chung Lau
Gerald McGlamery, Jr.
Sergio Kapusta
Omer Alpak
Mauricio Araya-Polo
Oner Celepcikay
Malcolm I. Ross

For Rice University degree-granting programs:

To view the list of official course offerings, please see [Rice's Course Catalog](https://courses.rice.edu/admweb/!SWKSCAT.cat?p_action=cata) (https://courses.rice.edu/admweb/!SWKSCAT.cat?p_action=cata).

To view the most recent semester's course schedule, please see [Rice's Course Schedule](https://courses.rice.edu/admweb/!SWKSCAT.cat) (<https://courses.rice.edu/admweb/!SWKSCAT.cat>).

Description and Code Legend

Note: Internally, the university uses the following descriptions, codes, and abbreviations for this academic program. The following is a quick reference:

Course Catalog/Schedule

- Course offerings/subject code: Courses from various subjects may apply towards this program

Department (or Program) Description and Code

- Energy Transition and Sustainability: ETAS

Graduate Degree Description and Code

- Master of Energy Transition and Sustainability degree: METS

Graduate Degree Program Description and Code

- Degree Program in Energy Transition and Sustainability: ETAS

Graduate Degree Program Areas of Specialization Descriptions and Attribute Codes*

- Area of Specialization in Engineering: ETEN
- Area of Specialization in Geoscience: ETGS

CIP Code and Description ¹

- ETAS Major/Program: CIP Code/Title: 14.4801 – Energy Systems Engineering, General.

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* *Systems Use Only: this information is used solely by internal offices at Rice University (such as OTR, GPS, etc.) and primarily within student information systems and support.*

¹ Classification of Instructional Programs (CIP) 2020 Codes and Descriptions from the National Center for Education Statistics: <https://nces.ed.gov/ipeds/cipcode/> (<https://nces.ed.gov/ipeds/cipcode/>)