



RICE UNIVERSITY

# Master of Energy Transition and Sustainability

School of Engineering / School of Natural Sciences



*Presented by*  
***Juli Morgan / Mike Wong***  
**METS Co-Directors**



# METS Co-Directors



Julia K. Morgan

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# METS Steering Committee



Jonathan Ajo-Franklin

Professor, Earth, Environmental and Planetary Sciences



Walter Chapman

William W. Akers Chair Professor, Chemical and Biomolecular Engineering  
Director of Undergraduate Studies



Daniel Cohan

Associate Professor, Civil and Environmental Engineering; PSM-EA Program Director



Ericson de Paula

Lecturer, Chemical and Biomolecular Engineering; MChE Program Director



Cin-Ty Lee

Harry Carothers Wiess Professor of Geology, Earth, Environmental and Planetary Sciences



Kenneth B. Medlock III

James A. Baker, III, and Susan G. Baker Fellow in Energy and Resource Economics; Senior Director, Center for Energy Studies



Colin A. Zelt

Professor, Earth, Environmental and Planetary Sciences; PSM-EG Program Director



# METS Program Overview

A professional, non-thesis degree program for scientists and engineers who will design sustainable energy solutions for the evolving global energy landscape.

31 credit hours of curated courses at 500-level or above.

Includes: - 3 credit-hour capstone project.

Interdisciplinary program drawing upon faculty and course offerings across multiple departments within engineering and natural sciences to address future energy challenges.

The program can be completed on a full-time or part-time basis, over 2-4 semesters.

Program tailored for individuals holding a BA or a BS degree in a quantitative major (engineering or science) from an accredited institution.

Conferences, Colloquiums, etc.  
Networking and Professional Development Opportunities  
School and Department Events.



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# METS Curriculum Overview

## Core Requirements

- CHBE 680 / EEPS 680: ENERGY TRANSITION SEMINAR
- CHBE 549 / EEPS 549: ECONOMICS AND POLICIES OF ENERGY TRANSITION
- CHBE 552: ENGINEERING FUNDAMENTALS OF LOW CARBON ENERGIES
- EEPS 582: GEOSCIENCES FOR THE ENERGY TRANSITION
- BIOS 580: SUSTAINABLE DEVELOPMENT AND REPORTING

## Area of Specialization

Select 1 of the following Areas:

- **GEOSCIENCES**
- **ENGINEERING**

Capstone Requirement :

- CEVE 507: ENERGY AND THE ENVIRONMENT

[Visit the METS website for a comprehensive overview of the program.](#)



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# Geoscience Electives

Course substitutions possible in consultation with program advisors



APPLIED SUBSURFACE SYSTEMS:  
ANALYTICAL METHODS FOR  
ENERGY AND SUSTAINABILITY

COMPUTATIONAL AND DATA  
SCIENCE IN THE ENERGY  
INDUSTRY

DATA SCIENCE METHODS AND  
DATA MANAGEMENT

NATURE-BASED CARBON  
SEQUESTRATION

INTRODUCTION TO GEOTHERMAL  
ENERGY SYSTEMS

EARTH'S NATURAL RESOURCES FOR  
THE ENERGY TRANSITION

EXPLORATION GEOPHYSICS

CARBON CAPTURE, UTILIZATION  
AND SEQUESTRATION



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# Engineering Electives

Course substitutions possible in consultation with program advisors



TECHNOECONOMIC ANALYSIS AND  
ENGINEERING DECISION TOOLS

FUNDAMENTALS AND  
APPLICATIONS IN  
ELECTROCHEMICAL ENERGY  
CONVERSION

SEPARATION TECH-NOLOGIES FOR  
CHEMICAL AND BIOMOLECULAR  
PROCESSES

ANALYSIS OF ENERGY SYSTEMS

MATERIALS FOR ENERGY  
TRANSITION AND SUSTAINABILITY

INDUSTRIAL CHEMICAL PROCESSES  
AND THE ENERGY TRANSITION

COMPUTATIONAL AND DATA  
SCIENCE IN THE ENERGY  
INDUSTRY

CARBON CAPTURE, UTILIZATION  
AND SEQUESTRATION



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# Program Overview

- GRE: Strongly Recommended but not required for FALL 25
- TOEFL/ IELTS: Waived if the student has graduated from an English-speaking university >100 web-based
- GPA: Minimum 75% (3.0 out of 4.0) as converted

Tuition for Professional Master's Programs in the School of Engineering for academic year 2025–26 is:

- \$59,100 per academic year (max)
- \$29,550 per semester (max)
- \$1907 per credit hour

## Prerequisites

## Test scores

## Requirements

## Tuition

## Deadlines

- Required:
  - Calculus, Physics, Chemistry
- Recommended:
  - Differential Equations, Linear Algebra
  - Computer Programming
- Three Letters of recommendation
  - At least one from academic institution
- Fall Admission: Feb 15
  - ... *Rolling Admissions*
- Spring Admission: Nov 1





## Important Links



[Masters of Energy  
Transition and  
Sustainability Overview](#)

[GRB School of Engineering &  
Computing](#)

[Wiess School of Natural Sciences](#)

[Visit Rice](#)

[Office of International Students and  
Scholars](#)

[Registrar's Office](#)

# Student Resources



● [Campus Resources](#)

● [Center for Career Development](#)

● [Graduate and Postdoctoral Studies](#)

● [Wellbeing and Counseling Center](#)

● [Student Health Services](#)



# Life at Rice



## Houston, Energy Capital of the World

Our location in Houston, Texas the fourth-largest city and most-diverse city in the United States, means that you'll have plenty of opportunity for interaction with industry in a hospitable city that has no shortage of things to do.



## Dining and Culture

Whether you're looking for all-American fare or want to try great Tex-Mex, authentic Thai, or Middle Eastern cuisine, you'll be able to satisfy your appetite at one of Houston's [more than 10,000 restaurants](#).

Houston also boasts many world-renowned museums, arts and music venues.





# Q & A



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