The professional master’s degree in Subsurface Geoscience is designed for students who wish to become proficient in applying geological knowledge and geophysical methods to finding and developing reserves of oil and natural gas.

The MSSG degree program offers three areas of specialization:

- **Energy Data Management**: prepares students to understand exploration and production as a data-driven business, to become data enabled geoscientists to match demands in the energy industry, or
- **Geology**: prepares students to be explorationists, with strong skills in using seismic and other geophysical methods along with geological principles to find oil and natural gas, or
- **Geophysics**: prepares students to become technical experts in aspects of exploration seismology.

The MS in Subsurface Geoscience (MSSG) degree is part of the professional science master’s (PSM) program at Rice housed in the Wiess School of Natural Sciences. These master’s degrees are designed for students seeking to gain further scientific core expertise coupled with enhanced management and communication skills. They instill a level of scholastic proficiency that exceeds that of the bachelor’s level, and create the cross-functional aptitudes needed in modern industry. This program will allow students to move more easily into careers related to energy data management, geology, and/or geophysics.

A coordinated MBA/MSSG degrees program is also offered in conjunction with the Jesse H. Jones Graduate School of Business.

Subsurface Geoscience does not currently offer an academic program at the undergraduate level.

**Master's Program**

- Master of Science in Subsurface Geoscience (MSSG) Degree

**Coordinated Program**

- Master of Science in Subsurface Geoscience (MSSG) Degree / Master of Business Administration (MBA) Degree

**Director**
Colin A. Zelt

**Professors**
Jonathan Ajo-Franklin
Alan R. Levander
Julia K. Morgan
Fenglin Niu

**Associate Professors**
Helge Gonnerman
Richard Gordon

**Assistant Professors**
Melodie E. French
Jeffrey Nittouer

**Adjunct Faculty**
Kenneth Abdullah
Omer Alpak
Mauricio Araya
Kevin Biddle
Omer Celepcikay
Detlef Hohl
Jeffrey Nunn
Malcolm Ross
Kurt Rudolph
Eric Scott

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)
To view the most recent semester's course schedule, please see Rice's Course Schedule (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 codes: Courses from various subjects may apply toward the graduate degree.

**Program Description and Code**

- Earth, Environmental, and Planetary Sciences: EEPS

**Graduate Degree Description and Code**

- Master of Science in Subsurface Geoscience degree: MSSG

**Graduate Degree Program Description and Code**

- Degree Program in Subsurface Geoscience: SGEO
CIP Code and Description

- SGEO Major/Program: CIP Code/Title: 40.0601 - Geology/Earth Science, General

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