Naveen Jindal School of Management

Master of Science in Energy Management

36 semester credit hours minimum

Faculty

**Professors:** Alain Bensoussan, Gary Bolton, Metín Çakanyildirim, Milind Dawande, Theodore E. Day, Ganesh Janakiraman, Elena Katok, Stanley Liebowitz, Özalp Özer, Michael J. Rebello, Kathryn E. Stecke, Harold Zhang

**Professor Emeritus:** Dale Osborne

**Clinical Professors:** David Cordell, Greg Durham, Randall S. Guttery, Peter Lewin, Divakar Rajamani, Kannan Ramanathan, Arthur Selender, Kenneth Smith

**Associate Professors:** Nina Baranchuk, Robert L. Kieschnick Jr., Alp Muharremoglu, Valery Polkovnichenko, David J. Springate, Kelsey D. Wei, Yexiao Xu, Alejandro Zentner, Feng Zhao

**Clinical Associate Professors:** Sonia Leach, Carolyn Reichert

**Assistant Professors:** Bernhard Ganglmair, Dorothée Honhon, Kyle Hyndman, Jun Li, Arzu Ozoguz, Alessio Saretto, Gonca P. Soysal, Christian Von-Drathen, Malcolm Wardlaw, Han (Victor) Xia, Shengqi Ye, Xiaofei Zhao

**Clinical Assistant Professors:** Shawn Alborz, Moran Bluestein, Ayfer Gurun, Liping Ma, Anastasia V. Shcherbakova

**Senior Lecturers:** Frank Anderson, George DeCourcy, Amal El-Ashmawi, Jared Pickens, James Richards

Degree Requirements

The Master of Science in Energy Management (MS EM) is an STEM (Science, Technology, Engineering and Mathematics) degree program (18-24 months) at the Naveen Jindal School of Management that prepares students for careers in oil, gas, renewable energy, electricity companies, banks and financial institutions that trade energy commodities, energy-focused consulting firms and major energy consuming corporations.

The curriculum includes a significant number of experiential learning opportunities. Energy Management courses incorporate a variety of techniques to teach students how to value energy companies and projects, develop operating strategies, negotiate contracts, and manage energy-specific risks. The development of the program was motivated by a high concentration of energy companies in the Dallas/Fort Worth area and UT Dallas's aims to address skill shortages in industries
critical to the Texas economy. Students must maintain a 3.0 grade point average in both core courses and in aggregate courses to qualify for the MS degree.

**Prerequisites**

Prerequisite knowledge in advanced Math (Probability/Statistics) is required for MS in Energy Management degree program. Applicants need to have earned a "B" or better in advanced Math or its equivalent to satisfy the prerequisite. Applicants who have not satisfied this requirement may be admitted but will need to satisfy the prerequisite within the first semester of UT Dallas course work, by taking **OPRE 6301 Quantitative Introduction to Risk and Uncertainty in Business**.

**Course Requirements**

**Business Core Courses: 9 semester credit hours**

- **FIN 6301** Financial Management
- **MECO 6303** Business Economics
- **OPRE 6302** Operations Management

**Energy Core Courses: 15 semester credit hours**

- **FIN 6335** Energy Finance
- **FIN 6336** Energy Accounting and Taxation
- **ENGY 6330** Energy Law and Contacts
- **MECO 6318** Energy Economics
- **OPRE 6389** Introduction to Managing Energy: Risk, Investment, and Technology (MERIT)

**Elective Courses: 12 semester credit hours**

- **FIN 6341** Energy Risk Management
- **FIN 6360** Options and Futures Markets
- **GISC 6381** Geographic Information Systems Fundamentals
- **ENGY 6331** Capstone Project in Energy
- **MECO 6312** Applied Econometrics and Time Series Analysis
- **MECO 6352** Financial Negotiation and Dispute Resolution
- **MKT 6309** Marketing Research
- **OPRE 6332** Spreadsheet Modeling and Analytics
- **OPRE 6335** Risk and Decision Analysis
OPRE 6362 Project Management in Engineering and Operations

OPRE 6366 Global Supply Chain Management

or OPRE 6378 Supply Chain Strategy

OPRE 6370 Global Logistics and Transportation

OPRE 6371 Purchasing, Sourcing and Contract Management