Naveen Jindal School of Management

Master of Science in Energy Management

36 semester credit hours minimum

Faculty

Professors: Alain Bensoussan, Gary Bolton, Metin 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