

GLOBAL ENERGY MANAGEMENT (GEMM)

GEMM 6000 - 21st Century Global Energy Issues and Realities (3 Credits)

Introduction to the global energy industry's past, present and future. Current and historical issues in regions such as: Atlantic Basin, former Soviet Union, east of Suez, North and South America will be covered. World production centers and markets are discussed to include relevant energy security, scenario planning, risk management and regulation, deregulation, and environmental concerns. Note: Students will learn the geographic distribution of energy resources worldwide including governmental systems. Repeatable. Max Hours: 6 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 6.

Restrictions: Restricted to GEMM majors within the Business School.

GEMM 6100 - Global Energy Economics (3 Credits)

Course includes energy geo-economics with an introduction to managerial tools of the trade. Topics will include world energy markets-demand and supply; refining and marketing, energy forecasts, oil and gas transportation, and National Oil Companies vs. International Oil Companies. An introduction to environmental economics will also help students connect the energy industry to sustainable work practices. In addition students will learn the geographic distribution of energy resources worldwide along with the political and government systems associated with those resources. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to GEMM majors within the Business School.

GEMM 6200 - Environmental, Regulatory, Legal & Political Environment in the Energy Industry (3 Credits)

Exploration of current political situations regarding the energy industry, its environmental impact in the short and long term. Topics include climate change, pollution, solid wastes and conversions to natural resources. Students will become familiar with national and international energy laws and regulations, financial arrangements, confidentiality, and bidding agreements. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to GEMM majors within the Business School.

GEMM 6210 - Energy and the Law: Property and Contracts (3 Credits)

The elective will focus on the process of managing the use and development of land resources in a sustainable way. Topics such as; public controls, powers used for land regulation, and an intro to real estate will be covered to enhance students understanding of land management and its application to the energy industry. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to GEMM majors within the Business School.

GEMM 6220 - Interacting With Foreign Governments And State Enterprises (3 Credits)

Globalization of many energy companies, dwindling U.S. energy sources, and growing overseas energy demand have increased the need for energy professionals to gain expertise in doing business with foreign governments and state enterprises, which play a much greater role in the ownership and operation of energy extraction and energy delivery in virtually all countries beyond the United States and Canada. This course reviews negotiation strategies in the context of uncertain contract enforcement, volatility and uncertainty of prices and restrictions, and highly contentious political contexts. It also reviews the approaches for interacting effectively with state enterprises that are often undercapitalized and inefficient, and examines how valuation of energy assets can take into account political risk, and requirements to provide infrastructure and social services. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to GEMM majors within the Business School.

GEMM 6230 - Political Risk Management for Global Energy Environment (3 Credits)

The course examines public influence on energy business activities. Students will explore the economics of political action and methods for evaluating how stakeholder groups interact to influence political outcomes. They will use these tools to develop strategies for stakeholder engagement and to manage business risks. Max hours: 3 Credits.

Grading Basis: Letter Grade

GEMM 6240 - Environmental, Social, Governance (ESG) Trends in Energy & Commodities (3 Credits)

This course will introduce students to the fundamental concepts and terminology associated with Environmental, Social, Governance (ESG). The evolution of climate change and ESG will be reviewed in terms of policies and metrics. The critical need commodities (agricultural, energy, and minerals, and metals) are studied to support more realistic views and opinions on climate change and ESG. An overarching goal is that students completing the course will have a sound understanding of ESG related policies and standards, the measuring metrics, and the benefits and costs associated with potential future trends. Cross-listed with CMDT 6240. Repeatable. Term offered: fall, spring. Max hours: 6 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 6.

Typically Offered: Fall, Spring.

GEMM 6300 - Technical Aspects of Energy Science (3 Credits)

This course will familiarize students with the newest renewable and alternative energy sources. The course does not focus on hydrocarbon sources but examines challenges and opportunities that exist for the establishment of the new energy sources to become viable in the industry. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to GEMM majors within the Business School.

GEMM 6400 - Leadership and Decision Making in the Global Energy Environment (3 Credits)

Students will examine leadership from an energy executive perspective. Topics include: how execs lead, change, innovation, interacting with top management teams, the board, leadership issues involved with governance of the firm, strategies for enhancing executive influence and ethics and responsibilities associated with exec. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to GEMM majors within the Business School.

GEMM 6410 - People Management in the Global Energy Environment (3 Credits)

Explains that people are energy's most important asset. Students will learn the latest research in human resource theories, study models, and learn how to develop organizational effectiveness from the firm's human capital. Concepts on: effective teamwork, attracting and retaining talent and using HR processes such as performance management and development to drive engagement will be discussed. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to GEMM majors within the Business School.

GEMM 6430 - Organizational Behavior in the Energy Industry (3 Credits)

Students will learn how to lead and manage human assets inside energy industries. Students will be exposed to fundamental principles of human behavior and increase their competence of working in diverse settings. Proper management can lead to a sustainable competitive advantage, because of management of employees and developing them into enthusiasts of your firm. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to GEMM majors within the Business School.

GEMM 6450 - Strategic Management of the Energy Industry (3 Credits)

The course focuses on how to improve an organization's competitiveness in a changing global environment. Emphasis on sustainable strategies, students develop skills to formulate, implement and evaluate organizational strategies in the rapidly changing environment. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to GEMM majors within the Business School.

GEMM 6460 - Integrated Information Management for Energy Firms (3 Credits)

This course covers issues associated with developing an integrated information managing strategy to identify major information categories used with an energy firm. It covers relationships to business processes to guide applications development and facilitate the integration and sharing of data. Using case studies from energy firms operational, administrative and strategic systems will be discussed. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to GEMM majors within the Business School.

GEMM 6470 - Energy Marketing and Communications (3 Credits)

This course covers the challenges faced by energy industries in developing branding, and developing new markets. Marketing both products and the company to its stakeholders, in the face of competitive pressures, students learn practical marketing tools and how they can be used to effect corporate strategy. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to GEMM majors within the Business School.

GEMM 6500 - Energy Accounting in the Global Markets (3 Credits)

The course builds a basic understanding of how to convey to decision makers, in and out of the firm, information about its resources. Emphasis on; analysis of income statements, balance sheet, statement and cash flows (historical financial accounting information) with specific coverage of cost-volume-profit, variance, forecasting, joint interest accounting and measurement of divisional performance. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to GEMM majors within the Business School.

GEMM 6600 - Introduction To Financial Management In The Energy Industry (3 Credits)

Introduction to fundamental principal of asset valuation and financing in competitive global markets. Providing the tools necessary to analyze day-to-day financial issues in the energy industry (time value of money, valuation of income streams, risk weighted investment returns.) Topics such as: risk management, arbitrage, hedging and foreign exchange will be covered. Repeatable. Max Hours: 6 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 6.

Restrictions: Restricted to GEMM majors within the Business School.

GEMM 6610 - Advanced Financial Management in the Energy Industry (3 Credits)

This course is focused on understanding the costs and benefits of various forms of capital. By examining internal and external managers, students will be able to assess alternative capital sources to achieve their strategic objectives. The course will introduce effective investor communication techniques. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to GEMM majors within the Business School.

GEMM 6620 - Energy Asset & Production Management for the Energy Industry (3 Credits)

The course covers management of an organization's energy resources and facilities as well as broader coverage of project management. Portfolio strategy, planning, scope, time, cost, quality and organizational effectiveness will be addressed. Also when budget, material, vendor relations or other factors disrupt a project, students will be prepared on how to react. Repeatable. Max Hours: 6 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 6.

Restrictions: Restricted to GEMM majors within the Business School.

GEMM 6630 - Project Development, Management and Leadership in Renewable Energy (3 Credits)

This course will focus on project management aspects of the renewable energy value stream from project conceptualization to decommissioning, inclusive of development, engineering, construction and operations.

GEMM 6630 will also focus on leadership and decision-making throughout the renewable energy value stream. Students will be exposed to decision making at corporate levels regarding directions energy and utility companies are taking towards expansion or transition into renewables. Max hours: 3 Credits.

Grading Basis: Letter Grade

Restrictions: Restricted to GEMM majors within the Business School.

Typically Offered: Fall, Spring.

GEMM 6670 - International Special Topics 2 (3 Credits)

International travel course focusing on energy topics that affect the world. Repeatable. Term offered: Fall, Spring, Summer. Max hours: 6 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 6.

Typically Offered: Fall, Spring, Summer.

GEMM 6690 - Special Topics (1-3 Credits)

This elective course is intended to be a variable-credit course specially designed to provide national and international learning opportunities. The course will offer concentrated problem-solving experiences within the energy industry through travel to industry-significant cities and regions, while meeting and visiting with people working and dealing with issues in the industry. Repeatable. Max Hours: 6 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 6.

GEMM 6699 - International Special Topics (3 Credits)

This course will offer concentrated problem-solving experiences within the energy industry through travel to industry significant cities and regions. Learn through a combination of guest lectures, field trips, and seminars with experts. Max hours: 3 Credits.

Grading Basis: Letter Grade

GEMM 6710 - Carbon Markets: Navigating the Future of Business (3 Credits)

Climate change is a fundamental threat to global economic development. Both public and private business practices and consumer behaviors will drive how economies will decarbonize and the extent of future impacts. Consumers, investors, and governments will increasingly look toward markets for innovation and create a low-carbon economy. This course will introduce carbon markets in all their forms and elaborate on policies, trade, reporting, and tracking. This course will demonstrate the value of carbon management to the bottom line, allowing participants to apply learnings to new and developing business strategies practically. Cross-listed with CMDT 6710. Repeatable. Max hours: 9 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 9.

Typically Offered: Fall, Spring.

GEMM 6840 - Independent Study (1-3 Credits)

Allow students to gain additional experience in a particular realm of energy business that interest them and suit their ultimate career goals.

Repeatable. Max Hours: 3 Credits.

Grading Basis: Letter Grade

Repeatable. Max Credits: 3.