

# ENERGY MANAGEMENT (EMGT)

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## Courses

### **EMGT 101 Energy Management Fundamentals 3 Credits**

Introduction to basic concepts of energy management.

### **EMGT 196 Topics: 1-3 Credits**

Course may be taken multiple times up to maximum of 15 credit hours.

### **EMGT 201 Land Management Fundamentals 3 Credits**

Introduction to basic concepts of land management and practices.

### **EMGT 296 Topics: 1-3 Credits**

Course may be taken multiple times up to maximum of 15 credit hours.

### **EMGT 340 Energy Industry Fundamentals 3 Credits**

Provides energy literacy through a survey of the sources, distribution and uses of energy, including the evolution of energy from wood fires to coal to oil to the current mix of coal, oil, natural gas, nuclear, hydroelectric, wind, geothermal, biomass, solar and ocean currents and tides. Future energy policy, sources, uses and case studies will be discussed as well as alternative energy sources.

**Prerequisites:** GEOL 111/GEOL 111L, and CHEM 121/CHEM 121L.

### **EMGT 350 Energy Development, Transportation, and Markets 3 Credits**

Overview of the energy industry domestic and worldwide. Basic energy industry drilling and production terminology, concepts and terms introduced and utilized throughout the course. Issues surrounding business models, upstream, midstream and downstream discussed in detail.

**Prerequisites:** GEOL 111/GEOL 111L, and FINA 301.

### **EMGT 355 Landman Geo-Petro-Engineering 3 Credits**

Petroleum engineering fundamentals. Properties of reservoir rock, single phase fluid flow through porous media, surface forces, fluid saturation, and completion technology. Evaluation of petroleum reservoir field data.

**Prerequisites:** EMGT 101 and EMGT 201.

### **EMGT 360 Real Property, Oil and Gas Law 3 Credits**

The body of case law surrounding oil and gas leases and leasehold interests, mineral titles, concurrent ownership and split estates, and governmental regulation of mineral development, including pooling and unitization of oil and gas leases.

**Prerequisites:** EMGT 340.

### **EMGT 395 Independent Study 1-3 Credits**

Course may be taken multiple times up to maximum of 6 credit hours.

### **EMGT 410 Energy Regulation and Compliance 3 Credits**

The body of law surrounding governmental regulation of mineral development, including environmental liability, diligent and prudent operations, contractual risk allocation, and regulatory case studies.

**Prerequisites:** EMGT 340.

### **EMGT 440 Energy Land Practices I 3 Credits**

Overview of the supply and demand for energy. The physical path of energy from source to user, transportation issues pertaining to energy, energy pricing methodologies, energy markets, and risk control through the use of derivatives in the energy industry.

**Prerequisites:** EMGT 340 and FINA 301.

### **EMGT 450 Energy Land Practices II 3 Credits**

Imparts mastery of the fundamental concepts and terminology related to real property law. Application of concepts to situations occurring in the energy environment as land is found, purchased and developed for use.

**Prerequisites:** EMGT 340.

### **EMGT 494 Energy Senior Seminar 3 Credits**

Legal, economic, environmental, and national security issues surrounding the energy industry. Alternative energy sources and other current issues in energy management.

**Prerequisites:** EMGT 340.

### **EMGT 495 Independent Study 1-3 Credits**

Course may be taken multiple times up to maximum of 6 credit hours.

### **EMGT 496 Topics 1-3 Credits**

Course may be taken multiple times up to maximum of 15 credit hours.

### **EMGT 499 Internship 1-9 Credits**

Course may be taken multiple times up to maximum of 15 credit hours.