

EARTH AND ENERGY RESOURCES LEADERSHIP

All courses are 3.0 credit units.

EERL 801 Resource Life Cycle Overview

This course will progress through an overview of the entire resource life cycle for energy and mineral commodities. The geological nature of the resource itself, its role as a commodity, and environmental aspects associated with its development, will be considered. Concepts of sustainable resource management, including emphasis on other related natural resources, such as ground and surface water, will be studied. This is a core course of the Master of Earth and Energy Resources Leadership program. Fall. A. Johnson, J. Varsek and H. Jamieson

EERL 802 Strategic Leadership in the Resource Sector

This course will be structured around four key elements of the role of a General Manager, applied specifically to the management and leadership tasks inherent in the Resource Sector: Understanding business context and environment, providing direction and leadership, establishing priorities and meeting commitments, and leading change and innovation. This is a core course of the Master of Earth and Energy Resources Leadership program. Winter. D. Detomasi

EERL 803 Economic Essentials for Mining and Oil and Gas – Part I

This course covers the basics of investment, financial analysis, project finance and risk pertinent to the resource extraction industries. This includes investment opportunities, fundamentals of cash-flow analysis for decision making, risk analysis and project finance, and the relationship between projects and the enterprise. This is a core course of the Master of Earth and Energy Resources Leadership program. Fall. B. Kashi
PREREQUISITE: EERL 801

EERL 804 Economic Essentials for Mining and Oil and Gas – Part II

This course will build on EERL 803 by broadening considerations from strictly financial measures to include integrated financial models which incorporate socio-economic and environmental considerations that are essential for decision making, stakeholder analysis, sustainable development, and negotiation and social license to operate. This is a core course of the Master of Earth and Energy Resources Leadership program. Summer. B. Kashi
PREREQUISITE: EERL 803

EERL 805 Operating Effectively: Law, Policy, Regulation and Ethics

This course focuses on current and emerging legal, policy, and ethical issues at each stage of the resource discovery, acquisition, extraction, and closure process. Students will improve their understanding of land and resource rights; aboriginal rights; corporate governance and social responsibility; climate change, environmental and resource regulation; permitting; community engagement and social license to operate; capital raising and disclosure obligations. This is a core course of the Master of Earth and Energy Resources Leadership program. Winter. A. Lintner

EERL 806 Communication, and Partnerships: Stakeholder Engagement Strategies

This course will address conflict management, leadership, and teambuilding strategies, while fostering collaborative efforts and working practically on implementing communication plans. The goal is to develop skills to address a multi-stakeholder business environment in the resource sector. This is a core course of the Master of Earth and Energy Resources Leadership program. Winter. A. Russell

EERL 807 Technology and Innovation

This course will be comprised of a series of online seminars throughout the duration of the program. The seminars will be hosted by subject matter experts and will address specific technical, scientific, and innovation topics, relevant to energy and mineral resources as identified by the students. This is a core course of the Master of Earth and Energy Resources Leadership program. Fall, Winter, Summer, Fall. J. Hostyn and R. Harrap

EERL 808 Minerals Life Cycle Track

This course is a more in-depth study of the minerals life cycle, considering resource aspects of geoscience and engineering, along with social, environmental, business and economic attributes in an integrated manner. Both technical and non-technical risk aspects and concepts of sustainability will be considered. This is an elective course of the Master of Earth and Energy Resources Leadership program. Fall. D. Kerr
PREREQUISITE: EERL 801

EERL 809 Energy Life Cycle Track

This course is a more detailed and in-depth study specifically on the energy resource life cycle, including exploration, development, processing, marketing, transport process. Topics will focus on conventional and unconventional petroleum resources. Resource and business/economic aspects considered in an integrated manner will be examined, and technical and non-technical risk will be considered. This is an elective course of the Master of Earth



and Energy Resources Leadership program. Field/site visit fee may apply. Summer. P. MacKay
PREREQUISITE: EERL 801

EERL 810 Field-Based Synthesis

This course will provide intensive analysis of a case example that is an actual resource development challenge related to either energy or mineral development, or both. Students will work in teams, as part of a field and/or site visit for approximately one week duration. Field trip fee may apply. This is an elective course of the Master of Earth and Energy Resources Leadership program. Field trip expenses approximately \$1,600. Summer. J. Hutchinson and R. Harrap
PREREQUISITE: EERL 801

EERL 811 Sector-Focused Project

This course provides flexibility for the student to focus on a topic of interest that is related to the content of the program, but not directly addressed by other course work. A student may bring a pertinent challenge from their work setting, or a project idea can be developed in consultation with the Program Director and program faculty. All project plans must receive approval of the Program Director prior to commencing this course. This is an elective course of the Master of Earth and Energy Resources Leadership program. Summer, Fall and Winter. V. Remenda
PREREQUISITE: EERL 801