

# 1. EXECUTIVE OVERVIEW

## 1.1 What is Energy Asset Management?

Energy Asset Management (EAM) is defined as “the management and administration of regulatory, financial, and contractual compliance pertaining to energy assets.” Disciplines involved in these complex and interrelated processes include:

- Land (Contracts and Mineral and Surface Administration),
- Joint Ventures,
- Operations Accounting (including Joint Venture Accounting and Production Accounting), and
- Well Asset Management.

EAM professionals comprise the majority of staff working in the non-technical areas of the upstream energy business. These professionals manage processes that are closely aligned with the marketing, information technology, and financial accounting functions of an organization, as well as being closely aligned with the technical side of the business.

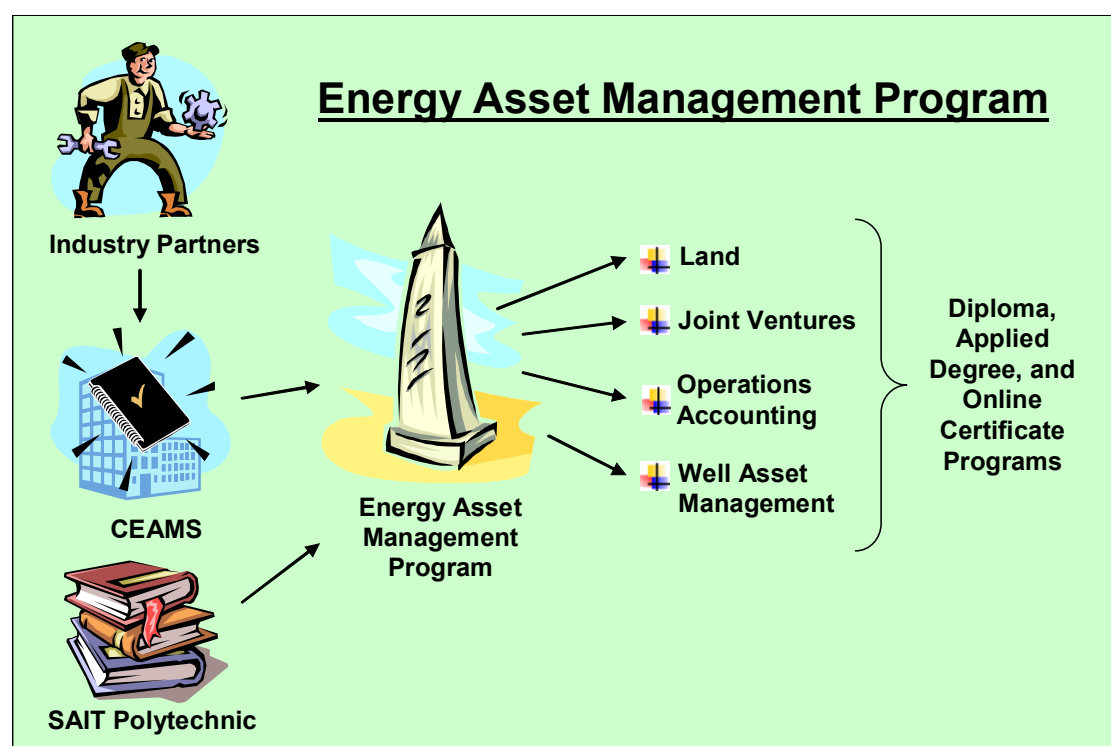
## 1.2 Why a Centre for Energy Asset Management Studies (CEAMS)?

The energy industry is evolving faster than ever—driven by higher commodity prices and improved technology. Various disciplines within the industry are being integrated into natural business groups to enhance the effectiveness and efficiency of the management of assets used to produce oil and gas. Demographics indicate that as the “boomers” retire, a shortage of skilled and properly trained personnel will result. More specifically:

- a large number of asset management staff are retiring in three to eight years,
- the entry of adequately trained individuals into the asset management fields is declining,
- continuing education programs are currently presented as silos and don’t respond to the industry’s need for integrated knowledge,
- evolution/expansion of the industry have put increasing pressure on all areas of asset management, and
- cost and risk management are becoming increasingly critical for exploration and production companies.

CEAMS is an organization formed to respond to these issues. The purpose of the organization is to promote and support approved formalized education to individuals who will be or are employed in the closely related non-technical EAM disciplines. The organization represents industry and supports SAIT as its educational partner in the joint venture development and delivery of the program. Together, SAIT and CEAMS will develop the EAM curriculum, have it approved by the provincial government, and deliver the courses and programs to new students and individuals already employed in the energy industry.

The following diagram provides a high-level overview of the Energy Asset Management program and its supporting network.

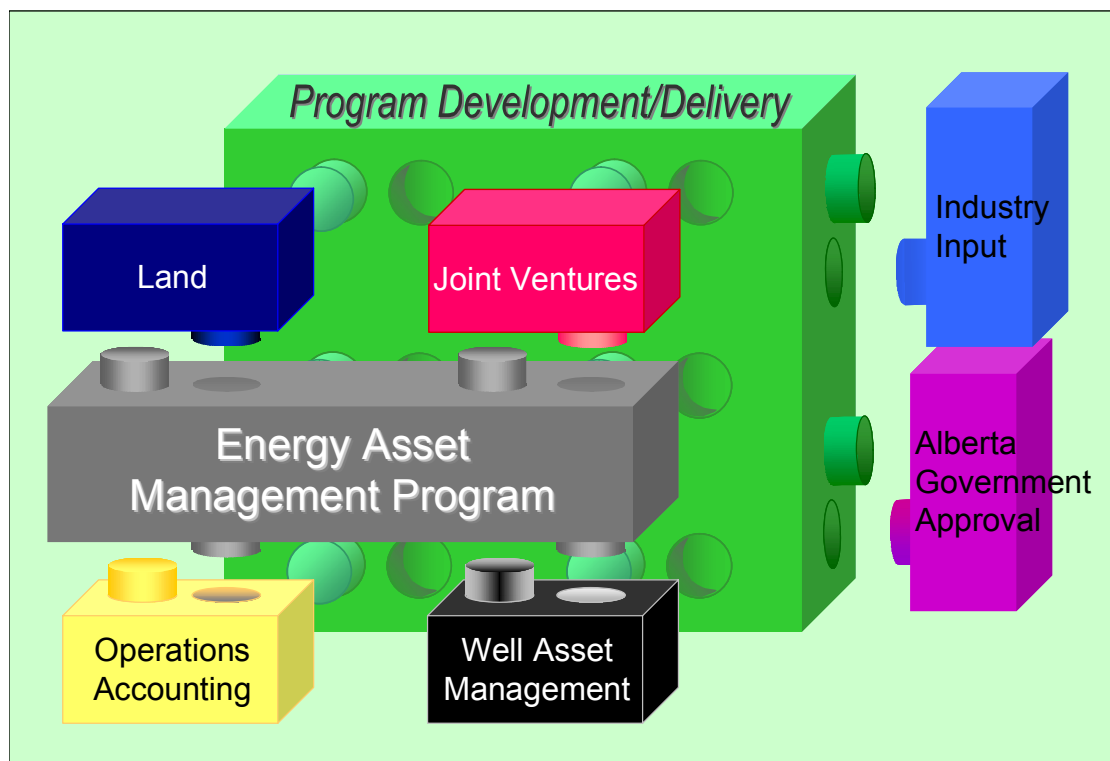


The EAM program will offer an approved two-year diploma, four-year specialized applied degree with three major streams, and a one-year online certificate.

What makes EAM unique is the foundation diploma, which is based on the life cycle for oil and gas assets. This approach was selected to facilitate a comprehensive understanding by the student of how all EAM disciplines relate. These programs will be complemented with suitable general business courses. By providing an appropriate mix of courses, students will be able to make an informed choice with respect to the discipline he or she may wish to pursue in the applied degree and associated work term program.

### 1.3 The EAM Process

To deliver approved training to EAM professionals, a number of activities will need to be completed. In the diagram below, those activities and the organizations required to complete those activities are shown.

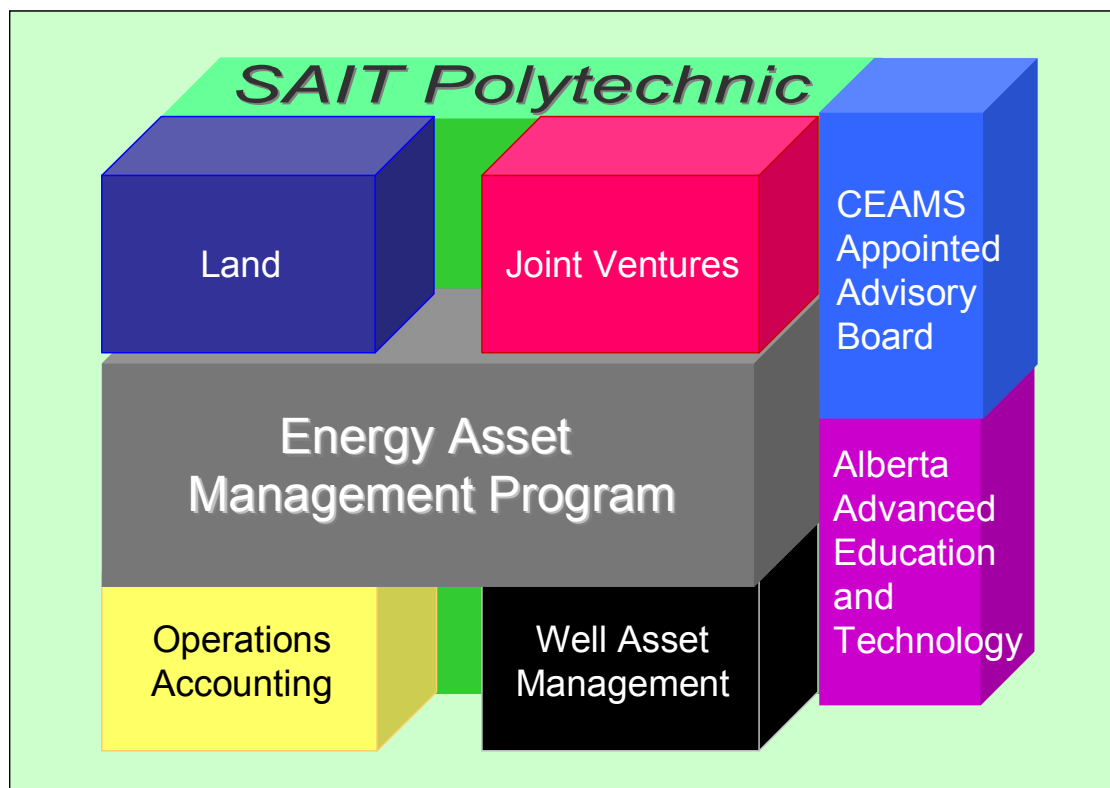


In summary:

- representatives from the energy industry will work through CEAMS with SAIT to develop the curriculum required for the EAM diploma, applied degree, and online certificate programs;
- separate industry representatives will vet the developed curriculum to ensure it is relevant, accurate, and integrates the different EAM disciplines;
- SAIT will seek approval for the curriculum and programs from Alberta Advanced Education and Technology;
- courses will be delivered at SAIT Polytechnic's Calgary campus using its existing classrooms and facilities;
- instructors will be selected from SAIT's pool of qualified instructors;
- instructors may also be EAM professionals selected from industry to instruct part-time, since a number of companies may allow members of their staff to participate in this learning initiative; and

- representatives from CEAMS will act as an ongoing advisory board to ensure curriculum and learning materials remain current and relevant.

Once all of the EAM components have been defined, established, and are operational, the joint venture between SAIT and CEAMS should look similar to the following.



The EAM initiative will result in the development of curriculum and the delivery of program training to learners from high school to retirement for the EAM sector.

## 1.4 CEAMS Mission

The mission of CEAMS is to create a non-profit and independent organization that can develop and promote EAM education programs and careers in the energy sector. This will be achieved by performing the following activities.

- Develop integrated learning strategies and curriculum for EAM careers.
- Work with educational institutions to develop and maintain leading-edge programs that respond to industry needs.
- Advocate to industry the benefits of EAM skills development and curriculum.

## 1.5 Key Success Factors

Critical success factors for the EAM initiative are as follows.

- Develop a skilled EAM workforce to meet the energy industry's ongoing and changing needs and interdependencies.
- Attract additional personnel to the EAM profession.
- Define career paths for EAM personnel.
- Establish EAM as a profession and career destination.
- Engage the energy industry and have them participate and support the activities of the initiative.
- Have other organizations, who offer related educational programs, understand how the EAM program can complement their educational offering.
- Engage provincial education departments and ministries.
- Establish EAM programs so they are financially secure and self-sustaining.
- Encourage volunteers from the energy industry to support EAM programs and activities.
- Ensure EAM learning modules and associated materials are continually provided when required, and that the content is ever-evolving and relevant.

## 1.6 Strategic Alliances

Many organizations have been involved in developing the EAM initiative to date. The following is a list of the organizations that have supported this endeavour.

### Education Partner

- SAIT Polytechnic

### Founding Partners

- Canadian Association of Petroleum Land Administration (CAPLA)
- Canadian Natural Resources Limited
- ConocoPhillips Canada Limited
- Devon Canada Corporation
- EnCana Corporation
- Petro-Canada

### Sponsor Companies

- Dominion Exploration Canada Ltd.
- Hunt Oil Company of Canada, Inc.
- Husky Energy
- Krang Energy Inc.

### Supporters

- Alberta Energy
- Canadian Association of Petroleum Landmen (CAPL)
- Petroleum Human Resources Council of Canada